HOW ACCURATE ARE CLIENTS INTERPRETING HEALTH MESSAGES COMMUNICATED BY HEALTH EDUCATION POSTERS COMMONLY DISPLAYED IN HEALTH INSTITUTIONS IN LUSAKA URBAN?

BY

MWALE KATHLEEN NAMPEMBA CHINTU

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DECLARATION

I hereby declare that the work presented in this study for the degree of Bachelor of Science in Nursing has not been presented either wholly or in part for any other degree and is not being currently submitted for any other degree.

Signed. M.K. .................

Approved by ....................  
Supervising Lecturer
I hereby certify that this research is entirely the result of my own independent study. The various sources to which I am indebted are clearly indicated in the text and in the references.

Signed: M.K. Chirita
DEDICATION

Dedicated to my dear husband Chifumbe Chintu and my children Muthuleni, Namwinga, Chintu, and Namukale.
ABSTRACT

The purpose of the study was to determine how accurate clients interpret health education messages communicated by health education posters displayed in most health institutions, organizations and/or public places. It was hoped that the findings would help health educators to critically analyse how they utilize the posters when conducting health education and help health workers especially those involved in developing educational aids to improve available posters and the ones to be developed by taking into consideration this aspect of their job.

The areas pertinent to the study include literature review on background to the concept of health education in traditional Zambia, development of modern health education, concept and philosophy of education and perception and communication. These aspects of the interpretation process are important in aiding clients to interpret accurately health messages communicated by posters.

The sample which was drawn from four health centres in Lusaka consisted of sixty (60) males and females aged between twenty (20) to forty (40) years of age. It was assumed that age group has been exposed to experiences that are likely to influence the accuracy with which they will interpret health messages communicated by health education posters. An interview schedule in conjunction with three health education posters were used to collect data.
Four health centres in Lusaka urban were selected for sampling. The probability sampling procedure approach was selected as an appropriate method. The interviews took place during the end of the rain season in March to avoid inconveniences caused by the rains which would discourage most clients from attending the health centres. Various problems related to collection of data were minimized through co-operation with officers in charge and the clients themselves.

The findings revealed than an average, respondents had a fair idea on health education. However, the majority did not interpret accurately the messages conveyed by the three (3) health education posters which were used in the study. These findings imply that there is need to look into nursing practices, administration, education and research that will improve on the quality of methods used in health education especially in the use of health education posters.
The study has been made possible through various people's assistance without whom it would have been not possible. I would like to thank my sponsors, the Ministry of Health for the Scholarship and study leave to undertake the degree programme in nursing.

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CHAPTER I

INTRODUCTION AND OPERATIONAL DEFINITIONS

I. INTRODUCTION

Health for all by the year 2,000 has become the world goal for the World Health Organisation and mostly for developing countries around the globe. Although in Zambia some demographic indicators of morbidity and mortality data are declining, the prevalence of some preventable diseases such as malaria, malnutrition in children, tuberculosis and parasitic infestations are among the ten leading causes of morbidity and mortality rates (Ministry of Health Report, 1978). These diseases and conditions are of a major concern to health workers. In order to reduce the high incidents of common preventable health problems and to achieve the objective of the World Health Organization, various methods of health education have been employed. The health education posters as one of the means of educating the public on health problems especially the ones that are preventable have been commonly used. Since the objective of health education is to change the behaviour of individuals from bad habits to desirable health practicing measures, it has been hoped that most preventable common health problems would be minimized through health education. Besides the changing of behaviour in individuals, health education aims at directing its activities toward the achievement of desirable health practicing measures. The aims of health education according to Mclean (1971 p. 110):

I. To ensure that the community regards health as an asset.
2. To equip the individual with the skills, knowledge and attitudes to help him solve his own health problems as far as possible.

3. To promote the development of health services.

These aims embrace the treatment of diseases and prevention and/or minimizing disabilities. Based on the aims of health education, it is assumed that clients would develop desirable qualities that would influence their attitudes and behaviour toward modern health practices.

Health education posters are widely used in Zambia as a media for conveying messages on health promoting, health maintenance and disease preventing measures. There are many advantages why health education posters are used. Some of the advantages are:-

1. Posters are attractive and therefore clients find them interesting to look at.

2. Posters reinforce health education employed through didactic methods. (Pattison and Barbour 1973 p.133)

3. Posters can be left on walls for longer periods and their message is given to anyone who looks at them (Leedman, 1972, p.57)

4. Posters as part of visuals arouse interest, can give an accurate impression, speed up understanding, help memory, stimulate imagination and provide shared experiences (Saunders 1974 p. 16).
5. They are suitable for both educated and uneducated.

6. Through the use of posters, a large number of clients can receive messages on health practicing measures.

Because of these advantages, it appears great attention has been given to the production of posters on the assumption that they are the most effective way of communicating health messages to the public at large other than the use of pamphlets, radio and television. However, no study has been done to evaluate the effectiveness of health education posters as an appropriate method of conveying health messages to clients. Inspite of intensive health education which has been in operation since 1966 (Ministry of Health Report, 1978 and the Second National Ten Year Development Plan, 1971-1981), morbidity and mortality rates are still high. For example, the infant mortality rate has only reduced from one hundred and forty-seven to one hundred and forty per thousand live births (I47-I40/I,000) between 1969 and 1979 (Ministry of Health Planning Unit, 1981.

Life expectance has increased from 40.8 to 46.7 years for males and forty-five (45) to fifty (50) years for females. It has also been observed that the high morbidity rate is caused by frequent readmissions resulting from preventable health problems like malaria, diarrhoea, anaemias and malnutrition. For example, in an unpublished study conducted at Lusaka's University Teaching Hospital Paediatric Department, Sibenge (1983) showed that thirty-two (32) percent of her subjects were admitted for the second time for treatment of malnutrition
and 8.5 percent were readmitted for the third time. Due to prevailing high morbidity and mortality rates arising from common preventable health problems inspite of health education efforts through the use of posters, it was felt that there was a need to investigate whether clients who might be in contact with the health education posters are able to interpret accurately messages communicated by commonly used health education posters displayed in health institutions and other public places.

Marshall (1973) states that health education is a process that bridges the gap between health information and health practices. It motivates the person to take the information and do something with it. Although health workers are very much aware of this process, probably they have found it difficult to get people understand what health messages mean or to get people do what they want them to do. It is in fact possible that clients are not interpreting accurately messages communicated by health education posters in order for them to be motivated to practice desirable health measures and/or understand and do what health workers expect them to do. This is a challenge to health workers especially those involved in the production of educational aids like posters and those using posters to reinforce their teaching or as independent means of conveying health messages. The health workers should critically examine the knowledge and skills required in the production of posters and their use. Saunders (1974, P6) has stated that health workers as communicators of health messages must ask,
in relation to visual aids:-

1. What is the content of the message?
2. For whom is the message meant?
3. What is the purpose of the message?
4. In what situation is the message being conveyed?
5. By what means is the message being conveyed?

Besides asking these questions health workers should consider further the use of available resources and available skills, for if visuals are badly used, they are a hinderance rather than a help. Saunders stressed further that physical factors, intellectual and emotional factors could be barriers to clients' interpretation of messages communicated by health workers or through the use of visual aids such as health education posters. Therefore since posters are used as a propaganda as well as teaching aids, certain qualities should be maintained in the posters. Saunders (1974 p. 62) has identified the following qualities of a good poster. It should

1. attract attention
2. Convey one message
3. Encourage action
4. Arouse public interest and be debatable
5. Be challenging to the thought
6. Imstill motivation.

In short the qualities assist clients in interpreting accurately messages communicated by health education posters.
The above literature reveals the importance of health education posters as an attempt to educate the public on crucial aspects of their health. Therefore it was felt necessary to determine how accurate the clients are interpreting messages communicated by such posters.

The reasons for the choice of this study resulted from lack of information on the effectiveness of health education posters as means of conveying health messages to the public and the high incidents of preventable health problems and repeated admissions from preventable health problems. Health education being a process with intellectual, psychological and social dimensions relating to activities which contribute to the ability of people to make informed decisions affecting the personal, family and community well being (Marshall)1971), there are many factors which are likely to influence clients' accuracy with which individuals interpret messages communicated by posters. Therefore, information related to this process has been included in the study. It includes traditional health education, modern health education, philosophy and concept of education, perception and communication. It is hoped that the study will enlighten health workers in practice and those involved in the production of posters to critically analyse the deficiencies in the posters currently in use and determine the best approach in utilizing those posters so that they can assist clients to interpret health messages accurately.
2. **OPERATIONAL DEFINITIONS**

For the purpose of the study, the following terms have been operationally defined as follows:

1. **ACCURATE**

   Refers to the message on the poster that the health communicator expects the clients to get when in contact with health education posters.

2. **CLIENT**

   A person who gets advice or help from a health worker.

3. **INTERPRETATION**

   To make out a meaning of health educational posters in the expected understanding of the health communicator.

4. **COMMUNICATION**

   Transmission of health messages from health education posters to the client.

5. **HEALTH EDUCATION**

   Imparting knowledge, skills and techniques to the clients on health promoting, health maintenance and disease preventing measures in order to practice health measures in a desirable manner so that the client might be health.

6. **HEALTH**

   A state of physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity (World Health Organization cited by...
7. **HEALTH EDUCATION POSTER**

A large placard with pictures with or without words displayed in public places for advertising, notification, or cautioning the public especially on preventable health problems. Health education posters are commonly displayed in hospitals and health centres.

3. **HEALTH CENTRE**

Health institution providing mainly preventive and curative services for minor ailments to a limited population.

9. **HEALTH INSTITUTION**

An established organization for providing health service, education of health personnel and conduction of research.

10. **HEALTH PRACTICING MEASURES**

These are measures taken by individuals, families and communities to promote health, maintain health, prevent or minimize disabilities and prevent diseases where possible. They include personal hygiene, recreation, exercise, nutrition, mental health, food, water, and environmental sanitation.

II. **TRADITIONAL HEALTH EDUCATION**

Traditional approach of imparting health practicing measures from one generation to the next within the social norms of the society in which individuals have been brought up.
12. MODERN HEALTH EDUCATION

Scientific approach of imparting knowledge, skills and techniques on health practicing measures

13. HEALTH WORKER

A person who has undergone an approved education and training programme to render health aid to people.

14. LITERACY

Refers to the ability of clients to read, write and understand things in both English and local languages.

15. PHILOSOPHY

Refers to ideas, beliefs, values and attitudes that individuals hold toward health measures.

16. PERCEPTION

The actual receiving or creation of awareness of what people see.

17. MODERN ZAMBIAN

Refers to present Zambian whose culture has been diluted by mixing with people from different origins.

18. LEVELS OF PREVENTION

Refers to (a) health promotion measures such as adequate nutrition, personal hygiene, mental health, recreation and exercise, occasional health check ups, attending clinics in critical life cycles such as pregnancy, childhood, family planning and genetic counselling.
These promote and maintain health, prevent or minimize disabilities.

(b) Early diagnosis and active treatment to prevent and/or minimize disability.

(c) Rehabilitation after disease process.

**PRIMARY HEALTH CARE**

Is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system of which it is a nucleus and of overall social and economic development of the community. (Alma Ata 1978 WHO/UNICEF joint Report cited by Ministry of Health Planning Unit, 1980 p. 2).
CHAPTER 2

LITERATURE REVIEW

1. INTRODUCTION

Due to scarcity of literature to provide information on how accurate clients in Lusaka Urban interpret messages communicated by health education posters, it is felt necessary to give a background of both traditional and modern health education in Zambia. The reasons for giving this background information are that, Zambia has emerged into a cosmopolitan society and approached to providing information on health education have to reflect traditional and modern practices which foster the maintenance and promotion of health practices of an individual, family and the community. The other reason is that no study has been done to evaluate how accurate the clients interpret messages communicated by health education posters. In discussing modern health education, philosophy and concept of education, perception and concept of education, perception and communication have been incorporated in relation to the accuracy with which clients are likely to interpret messages communicated by health education posters. However, some parts of the literature were obtained from secondary sources thus introducing an element of bias in the literature.

2. BACKGROUND TO THE CONCEPT OF HEALTH EDUCATION IN TRADITIONAL ZAMBIA

Different people react differently to the same piece of information. Each will measure it against his own existing beliefs and opinion. If the new idea agrees with him he may accept it, if it does not he will reject it unless he is prepared to modify his first opinion (Holmes, 1964 p. 121).

From the quotation above, it is clear that the accuracy with which clients will interpret messages communicated by health education posters is likely to be influenced by many factors which are individual's beliefs, culture, values, attitudes and educational level. In Zambia, culture has been diluted by other cultures from within Zambia itself as well as from
outside. For example, within Zambia, urbanization and industrialization have brought together individuals with different values, beliefs and attitudes from their own origins. These have intermingled and created another subculture. In work situations, one might find himself or herself in a totally new environment different from his own origin whereby he has to abide with the cultural practices of that community and at the same time has to practice his own culture. Another example is that Zambia has expatriates from different parts of the world working in different parts of the country. These are likely to influence the existing Zambian culture.

Therefore, the accuracy with which individuals are likely to interpret messages will be influenced by the culture within the environment the clients are living. Health education is not a new concept. In most African societies, health maintenance, health promotion and disease prevention are the main focus of traditional values which are practiced and transmitted from one generation to the next.

Individuals and the community as a whole centre most of their activities observing beliefs, values and taboos that maintain health, promote health and prevent diseases (Read, 1966). These experiences and activities are likely to influence the accuracy with which individuals might interpret health education messages conveyed by health workers. Health education traditionally is inco-operated in daily living. The villagers express the educational process through emphasizing life and time as the most important educational agencies (Amar, 1954 cited by Read 1966). This implies that experience is the basic element in conveying health education messages. Society determines which values, taboos, beliefs and attitudes have to be transmitted to the young generation. Appropriate methods of education to be employed for each of the ideas are employed in informal traditional health education.
time, age and place are factors considered to ensure that the intended values are transmitted at the right time, right place and the right age.

Read (1966 pp 70-70), lists some of the methods used in traditional health education. These are:

1. Proverbs. These are thought provoking traditional sayings to which individuals have to give appropriate meaning. The sayings could relate to measures or other life situations.

2. Ceremonies. These are events that demonstrate health maintenance, health promotion and disease prevention. Some of the common rituals are:
   a) Rituals for treatment of disease.
   b) Rituals for cleansing following death.
   c) Initiation ceremonies for the adolescent girls and boys during which they are taught health measures. They are also indoctrinated on traditional beliefs, values, taboos and attitudes some of which affect health.

3. General discipline and behavioural guidelines directed toward behavioural values such as practice of personal hygiene and behaviour during health times.

4. Dancing and use of masks. These convey messages through music and body movements. For example, the mguni Themu Tshamu dance symbolizes evils or drunkenness, while the Tshako masks used in some dances symbolize a person with venereal disease caused by immoral behaviour (Itenza 1979 p. 161 cited by Tembo 1999).

5. Use of traditional disease preventing charms and medicine. It has been observed that wearing charms and washing in roots when there is a suspected health related problem in the family is a common practice.

6. Isolation of individuals found to have a communicable disease. It is a strict practice to isolate identified family members found with diseases like leprosy, tuberculosis or venereal disease. Individuals with leprosy are totally excluded from the community, while their families are also dissociated by the community in many ways such as avoiding marrying in the family whose member has such disease. The venereal disease is referred to as the "shame disease" and those affected do not wear clothing and baths with the family members.
Appropriate care is directed to expectant mothers and those in postpartum period as measures to maintain, promote health and prevent complications for both the mother and the baby.

These practices would individuals' health behaviour in a cultural desirable pattern within his/her community. In the analysis of this health education approach, it is likely that the accuracy with which the clients will interpret messages communicated by health posters is likely to reflect on the traditional practices with which individuals have been brought up.

3. DEVELOPMENT OF MODERN HEALTH EDUCATION IN ZAMBIA

In the previous discussion on traditional health education, the background and culture of an individual have been identified as some of the factors that might influence the accuracy with which the clients are able to interpret messages communicated by health education posters. The Ministry of Health recognized the values and beliefs of the Zambian society as important aspects geared towards maintenance and promotion of health and prevention of diseases. Therefore, it was felt necessary to integrate positive traditional health education attributes into modern health education components in order to reduce the morbidity and mortality rates within the country.

Health education came into being as a result of high morbidity and mortality rates among children (Ministry of Health Report, 1978). In 1963, a population census estimated a crude death rate of nineteen per thousand population and morbidity rate among children was forty-five to fifty (45-50) percent out of every hundred children (Zambia First National Development Plan, 1969-1981). However, this figure could have been higher if all illnesses and deaths were reported to health institutions. An investigation into the causes of such high incidents of illnesses and deaths
was carried out in which it was discovered that most illnesses and deaths were preventable in nature. Therefore, health education was suggested as an alternative means of eradicating diseases along with active immunization programmes. All health institutions were to provide comprehensive health services in which health education was a major component. By 1966, the Health Education Unit was formed and Dr. Nowack was appointed as the medical officer in charge of the Health Education Unit. According to the ten year Nation Health Plan (1971-1982) (Ministry of Health Report, 1978), the unit's activities had objectives directed towards the development of health personnel, preparing and production of health educational materials and evaluation of health education activities. The purpose of these activities was to make individuals health conscious so that appropriate promotive and mainta-nance of health measures and disease preventing measures are taken accordingly. In order to facilitate this purpose, various settings including health institutions, formal schools, community development colleges, voluntary organizations and other intersectoral agencies are used in carrying out health education activities.

Since health education is concerned with changing people's behaviour, it is the unit's responsibility to devise appropriate methods of conveying health messages to clients so that they can facilitate the accuracy with which clients are likely to interpret messages communicated to them. Although evaluation of health education activities is one of the objectives for the health education unit, there has been on information to show whether clients are interpreting accurately messages communicated by health education posters. Probably the increase in morbidity and mortality rates in this country could be due to the fact that clients are interpreting messages accurately thereby creating
awareness to report to health centres for medical attention, or it could be the opposite of the fact that they are not interpreting the messages correctly and therefore not taking appropriate measures. It is therefore the focus of this study to determine how accurately clients are interpreting messages communicated by health education posters.

4. **METHODS USED IN MODERN HEALTH EDUCATION**

Various methods are used in health education depending on the message being conveyed, the setting, the clients and the nature of the health problem. The following three groups are the current methods in practice:

1. The acting methods of health education. They include group discussion and decision making, workshops, demonstrations, drama, community surveys and individual interviews.

2. The didactic methods of health education include lectures, speeches and mass media contact. In these methods of teaching communication is impersonal in that there is no immediate feedback from clients receiving the message. Therefore, it is difficult to determine the accuracy with which clients are interpreting the messages communicated to them.

3. Use of educational aids. Although they are part of mass media, it is necessary to categorize items independently because they can be used either in conjunction with didactic methods or be used independently. Their role is to facilitate other methods of health education. This method includes the use of flannelgraphs, projected aids, charts, wall newspapers, models and posters (FAO, 1970 p. 38).

In relation to educational aids, the use of posters is one of the aids commonly used to reach the public at large. It is important to realize how much education is taking place imperceptibly all the time, in form of impressions, ideas and snippets of information which are casually acquired. Mclean (1971 p. 116) states:

Few people regard their newspaper reading or television viewing as an extension of school learning, they are not concentrating very hard and they retain very little. Recollection of what has recently been seen or read of medical items from all kinds of sources in the media combine to form part of the ordinary lay person's ideas on health and disease.
This quotation implies three aspects of interpretation. Firstly, clients who may come in contact with health education posters may assume that the message is not of their concern but for somebody who is still in active formal educational process such as school children and teachers. Secondly, if the message is not of his concern, then he may not make an effort to interpret the message accurately. Thirdly, if he interpretes the message accurately it will only be temporarily retained and then all will be forgotten in a short time. In view of this, it is important that health workers determine the accuracy with which clients are able to interpret health education messages being conveyed by posters. While some individuals will treat health messages seriously others may not because of the differences in the interpretation of messages.

**SUMMARY**

The above methods of health education are some of the means of communicating health promotive, health maintenance and disease preventing measures to clients in a manner that is most appropriate to an individual. Clients may interpret messages conveyed by health posters differently according to whether they think the message is meant for them or not or whether it is for their concern.

5. **PHILOSOPHY AND CONCEPT OF EDUCATION**

Equally important and related to the study are the philosophy and concept of education. Early in the discussion, it became evident that health has been valued both traditionally and by modern Zambia. Appropriate methods to ensure that health values are transmitted to generations have been emphasized through tradition and modern education. In traditional education, it is shown that values to be learned determine the type of method to be employed in educating a particular community about health.
Similarly, the philosophy of education is concerned with a set of standards, values and attitudes that an individual has chosen as being acceptable to him (Heidgerken, 1965). These values, beliefs and attitudes determine what the concerned individuals should learn and the means of achieving the required set of standards and values. Built upon the philosophy, is the concept of education. This is aimed at changing the behaviour of the individual according to the philosophy being practiced in a given society. As stated earlier, since the philosophy of health education forms the basis of activities directed toward health practicing measures and the concept of education directs behaviour towards the acceptable standards, it is likely that these ideals may influence the interpretation of messages communicated by health education posters. In view of the similarities between traditional education, philosophy and concept of education, it is necessary to discuss how the philosophy and concept of education are likely to influence the accuracy with which clients are likely to interpret messages conveyed by the health education posters. Philosophy as stated earlier is concerned with set of standards and this includes health standards as well. In relation to cultural concepts of health and disease Amor (1960) states that in many cultures health and illness are inextricably connected with socially approved behaviour and moral conduct, hence such a view works as a stabilizing force and deterrent pressing for social conformity. This implies that socially approved behaviour and conduct provide the basis of activities which will be directed toward health promotion, health maintenance and disease preventing measures. Relating the above to health education posters, clients who might come in contact with the posters may try to interpret the message which will be associated with socially approved behaviour and moral conduct. Likewise, the philosophy of an individual or a community provides guidelines of how an individual should lead his life to be in conformity within expected health standards. Therefore, the philosophy and concept of any given
community may affect the interpretation of messages communicated by health education posters. Similarly in professional duties, one is guided by a code of ethics, beliefs and attitudes. However, a professional may have his own philosophy of education. In health education, a health educator plans and utilizes health education posters which means that the delivery of messages could be based on his own philosophy of education. This implies that when posters are used to educate individual(s), the professionals' own philosophy of education come into play and influences the message he attempts to communicate through the posters. As such, health educators have a duty to use the posters in ways that are acceptable to the community and to base the philosophy of health education around the needs of the community. Therefore, in imparting health messages, it is important that one understands the importance of beliefs, values and attitudes and how they differ among people in order to appreciate how each individual is likely to perceive appropriately information communicated to him.

Health education itself is a concept aimed at teaching and affecting changes of behaviour (Holmes 1964) to facilitate the accuracy with which clients are able to interpret messages conveyed to them through the health education posters. By transmitting acceptable values, beliefs and attitudes to individuals, the community is likely to develop individual desirable qualities.

Hurst and Peters (1970), state that educating people suggest a family of processes whose unity is the development of desirable qualities in them. In other words, individuals must conform to standards set within their community. They go on to state that education suggests not only that what develops in someone is valuable but also that it involves the development of knowledge and understanding. Whatever an educated man is, he is the one who has some understanding of expectations within the society he lives in.
In modern health education, it is expected that individuals after going through some educational instructions, would be able to interpret health messages accurately. However, the degree to which traditional influences facilitate or distort perception of information communicated on health education posters will vary between individuals based on the strength of their exposure to other cultures. Modern health education is trying to develop desirable qualities in people and equip them with the knowledge which would facilitate the accuracy of interpreting health messages and thereby enhance promotive, maintainance of health and disease preventing measures for individuals' and the community's well being.

In conclusion, both traditional and modern health education posses similar ideologies aimed at making individuals develop qualities desirable in a given society or a desirable change in behaviour. Both types of education are guided by philosophies based on the community's needs, attitudes, values and beliefs. The individual's or group's background, experience and philosophy could greatly influence perception and interpretation of messages conveyed by health education posters. It is important too, that health workers should be aware of their own philosophy of education and concept of education as they are likely to influence the messages being conveyed.
6. COMMUNICATION IN RELATION TO CLIENTS' INTERPRETATION OF HEALTH MESSAGES COMMUNICATED BY HEALTH EDUCATION POSTERS.

In the previous discussion it was shown that the concept and philosophy of education in both traditional and modern Zambia had means of transmitting desirable qualities related to health practicing measures. Formal and informal education are some of the means through which desirable information is passed from one individual to another. "This process of conveying the messages is communication" (Weaver, 11, 1973 p 26).

Communication is defined as imparting or exchanging ideas, knowledge and meaning among individuals through a medium of sign of some kind (Weaver, 11, 1987). This definition implies that the medium used could be a symbol such as a word, cartoon, mathematical formula or may be energy expressed in body movements such as facial expression, stance, gesture or a tone of voice (Weaver, 11, 1978). All these convey a message. The clients may come across a poster with some of the characteristics mentioned. However, successful communication is blocked by such factors as language, culture, educational background, values and attitudes. Therefore, each person perceives, the word differently because of his experience, knowledge and different culture. Similarly, the individual is likely to interpret the information communicated to him differently. Communication becomes much easier among individuals if they share the same background. If the transmitter and the receiver do not possess attitude similarities, the receiver will misinterpret the message. For example, in India, Shaking the Head means "Yes" but in Western Europe, it means "No". Patting the child on the head is a gesture of affection in some countries, but an insult in others (Ritchie, 1973).
Similarly, in Zambia, looking straight into the face of an adult when being talked to means that the particular young person is impolite while in other societies looking down when being talked to may simply guilt.

There are many potential barriers to communication because of differences in the background of individuals. Some of these barriers are likely to be reflected in the health posters. Thus, communication through health posters can mean a lot of different things to different individuals. Wrong conclusions can be drawn from posters. For example, in one country, a poster showing a thin woman hurrying along with a heavy basket on her head while a fat woman sitting and perspiring was to convey the message that keeping body weight down leads to health and vigor, it was however interpreted by local people as: "how lucky the lady sitting down is, to be so rich that she can eat well and have a servant to carry her load". (Ritchie, 1973 p 105). Another poster on the danger of flies in which the insects were greatly magnified to be visible, brought the comment: "How fortunate we are that the flies in our village are not huge as these." (Richie, 1973 p 105)

Misinterpretation of messages by clients may not only apply to the use of posters in conveying health messages; other methods used for conveying messages on health could also be misinterpreted. For example, in didactic method of teaching, teaching on nutrition that large portions of starch food is bad because the foods only provide energy, the energy is equated by listeners with virility vigor and vitality (Richie, 1983). Another example is that when educators assume that people understand what they have been told and will take recommended action, this assurance may be only a conventional "Yes", because it is impolite to say "No" (Richie, 1973). These examples do not mean that the clients who came across these posters or who listened to the health education talks were unintelligent, it's only that their background led them to different interpretation of facts.
To conclude, communication is closely related to perception in that interpretation of information is greatly influenced by the client's background. Although education aims to changing peoples behaviour, communication methods used in modern health education should reflect values, beliefs, culture and attitudes of the community being served. Similarly, since perception of information is influenced by experience, knowledge and background of individuals, means of conveying health messages to clients should reflect these aspects.

PERCEPTION IN RELATION TO CLIENTS' ACCURACY IN INTERPRETING HEALTH MESSAGES COMMUNICATED BY HEALTH EDUCATION POSTERS

Closely related to communication is perception. In the process of education, individuals develop a sense of discriminating and recognising sensation which enables them to interpret the health messages conveyed according to their understanding. This section discusses how information is processed into meanings when it is received by an individual. This process involves selecting, organising and interpreting information after it has been communicated. For the purpose of this discussion, perception is defined as creating meaning (Weaver, 11, 1978). Perception develops as one grows and is created by interests, experiences and knowledge. It is assumed that culture and parents' education probably have the strongest influence on how one perceives the world. Therefore, perception plays a role in accurate interpretation of health posters by clients.

Weaver 11, (1978) claims that perception consists of three components which are selecting, organising and interpreting information. In selecting, one limits the quantity of stimuli to which the meaning will be attached. This is because the stimuli are too many and usually the individual chooses the focus on the message which is most meaningful to him.
This is done on the basis of experience. Organizing involves arranging or determining information in relationship which is put together so that it can be understood. The individual looks for a frame of reference for the message. This includes non-verbal pictures, expressions, gestures and body movements. Besides putting information together, it has to be simplified to avoid confusion and distortion. Interpreting the message in this context means assigning meaning, making evaluation and drawing conclusions. Here, experience and knowledge are brought together. This interpretation is a subjective judgement. It is a product of one's creation and may or may not be valid (Weaver, 11 1978).

In the light of these three components, perception of health education posters may be influenced by his past experience such as having suffered from a certain condition or having a member of the family who is a patient. Such experiences facilitate the degree of accuracy with which individuals may interpret messages (Weaver 11, 1978) conveyed by health education posters. It was mentioned earlier that few people regard mass media as an extension of school learning (McLean 1971).

Therefore, if the individual who comes in contact with health posters is among the people who regard mass media as part of school learning, his background of education and the parents' education would influence the accuracy of interpreting health messages. Interpretation in this context is based on experience and knowledge; these will come into play when the clients receive messages conveyed by health education posters. As growing up is part of experience it could be assumed that age, occupation and different responsibilities (Weaver 11, 1978) would also influence the degree with which clients are likely to interpret messages communicated by health education posters.

Although the three components of perception seem to show interpretation of messages is without any form of distortion, there are some
factors that could influence the individual's perception. These are stereotyping, proximity of the messages and the role played by the individual (Weaver 11 1978 p 86) who may be in contact with the message. In stereotyping, there is a process of assigning fixed labels or placing things and people one encounters into categories one has already established. Its purpose is to simplify the task of judgement. In relation to health posters, if a client comes in contact with posters showing an expectant mother in a health centre sitting being weighed, the client may simply interpret that it is a normal life situation to be pregnant and pregnant mothers obviously weigh heavier than when they are not pregnant. This is a life situation that is encountered everyday and the judgement is as simple as seen by the physique of the expectant mother.

Proximity means the nearness of something in place, time or relationship. Proximity consists of physical and psychological proximity (Weaver 11 1978 p. 86). Physical proximity refers to the nearness of an object. Here the accuracy of perception of an object depends on physical distance. The nearer the object, the more accurate is the message interpreted. This implies that if clients cannot get near enough to the posters, or if posters are placed in conspicuous places then the accuracy of interpretation of the message will be affected. Psychological proximity refers to attitudinally similarity with the individuals. The more similar the attitude to the people, the more it is easier to communicate with individuals. Similarly, individuals who have been exposed to health education will have similar attitudes about the health education posters and therefore will interpret health messages much more appropriately.
The last factor affecting perception of messages conveyed by health posters is the role played by the clients who may come in contact with the health education posters. For example, if the client is in a role of a patient, his expectations, needs, beliefs, values, and attitudes about the situation he is in may have an effect on how he perceives the message communicated by health education posters. In general, clients could look at the posters as mere decorations. The way the message is constructed will be related to where the client is at the time he is in contact with the posters and his affinity with them. Another factor that will influence perception is the degree of understanding and experience as one grows older. Based on understanding and experience, one's perception is unique to him and even though an individual might have control over it, culture has an influence on the meaning that one perceives. In the same manner, clients are different individuals with different interests, knowledge, and experiences. Therefore, perception of the same poster may be interpreted in varied ways.

In conclusion, it could be stated that the accuracy of interpreting messages communicated by health posters will be affected by the clients' perception of information which is influenced by knowledge, experience, culture, and the environment.
CHAPTER 3

STATEMENT OF THE PROBLEM

The Ministry of Health Report (1978) has revealed that the high incidents of morbidity and mortality rates in Zambia are mostly due to common diseases which are preventable in nature. Various health education methods including the use of health education posters as an independent method of teaching have been widely employed to educate the public at large on health promoting measures, health maintenance and disease preventing measures. It is assumed that through health education posters intended health messages are being conveyed and that clients who come in contact with the posters are able to interpret accurately the messages communicated to them. However, the effectiveness of health education posters as a means of conveying health messages and the degree of accuracy with which individuals interpret the messages has not been evaluated.

Insipite of intensive health education efforts especially through the use of health education posters, the pattern of preventable health problems has not changed. In fact the figures could be even higher if all cases were reported to health institutions. If clients are interpreting accurately messages communicated by health education posters, why are the incidents of preventable health problems still high? For example, Malnutrition, Anaemia, Tuberculosis, Malaria and many others are among the ten (10) leading causes of morbidity in both children and adults in Zambia. In fact Malnutrition and Anaemia are ranked as number one causes of morbidity while Measles is ranked as the second cause of morbidity and

One of the aims of health education is concerned with change of behaviour in individuals directed toward modern health practicing measures. It is hoped that through health education clients would develop an awareness of an health consciousness and thus would be influenced to practice health measures at all levels of prevention. Diseases which have been mentioned as among the ten (10) leading causes of morbidity and mortality could be easily controlled if individuals took responsibility of their own health as far as they are able to.

Knowles (1976) cited by Galli (1978 p.40) has stated:—

People have been led to believe that — more doctors — hospital based technology will improve health. Unfortunately none of them will. The next major advances in health of the —— people will come from assumption of individual responsibility for ones own health and necessary change in life style for the majority of people.

This statement has two (2) important factors that could contribute to the high incidence of morbidity. Firstly, people believe that only curative measures are the most important health measures to be practiced and therefore the individual will only seek medical/health advice when he feels that the condition requires curative treatment. In this respect could it be assumed that clients are misinterpreting the messages on health education posters?

To the clients the message may be only concerned with treatment of illness as the important measure to be taken and hot preventive measures at all levels. Therefore clients might not be influenced to practice the appropriate measures which will help to reduce preventable diseases.
Secondly, the statement is emphasizing that individuals should assume responsibility for their own health. If clients are responsible for their own health, do they spend enough time to look at the posters so that they might interpret the messages accurately? For example, nutrition has received extensive publicity since the health education unit was formed in 1966. However, in spite of the efforts, Malnutrition and other related diseases are still among the ten (10) leading causes of morbidity. Malnutrition alone constituted 17.9 per cent, while Measles constituted 13.8 per cent of total deaths among children in Zambia. Are parents interpreting accurately the health messages communicated by health education posters so that they would be responsible. Spend enough time to look at the posters so that they might interpret the messages accurately? For example, nutrition has received extensive publicity, since the health education unit was formed in Zambia, in 1966. However, in spite of the efforts, Malnutrition and other related diseases are still among the ten (10) leading causes of morbidity. Malnutrition alone constituted (17.9) per cent while Measles constituted (13.8) per cent of total deaths among children in Zambia. Are parents interpreting accurately the health messages communicated by posters so that they would be responsible for practicing health promotive measures such as taking children for immunizations and providing adequate nutrition according to the children's growth and developmental needs?

As a result of increased morbidity, this has led to the problem of overcrowding in health institutions by clients suffering from conditions that could be prevented. The increased morbidity and overcrowding have led to constraints such as:

1. High cost of medicare in terms of budget to meet the demands for drug supply, workers required to man the health problems and other relevant resources necessary for providing quality care.
2. Because of overcrowdng, the hospitals and health centres fail to provide quality of care. Control of infection becomes difficult. For example, it is common to find three (3) children sharing one cot bed in Paediatric Wards, and patients with suspected infectious diseases such as Tuberculosis are nursed together with non infectious cases. This also contributes to difficulties in the general management of the hospital environment. Instead of health institutions providing health education, by practicing health promotive, health maintenance and disease preventing measures, the institutions become a source of health problems.

3. Inherent within overcrowding is repeated admissions. Clients who have been treated from preventable problems have usually suffered from the same conditions. This increases the number of in-patients.

4. The National economy has been affected in that a country with high morbidity is likely to yield less in terms of productivity because a high percentage of productive population is constantly in ill-health and also has to spend a lot of capital on looking after a large population of sick people.

These constraints affect the quality of care to be provided for clients.

As a result of repeated admissions and long stay in hospitals, and because of overcrowding clients may contract other diseases. Reflecting on these constraints, if clients are interpreting accurately messages communicated to them by the health education posters, Why is there a high incidence of preventable diseases among clients who are repeatedly admitted to health institutions with the same preventable health problems? Why is there overcrowding health institutions when most conditions attended to are preventable in nature? Why should the national health budget spend more money on preventable health problems?

Thirty (30) per cent of the Zambian population lives in Urban Areas and Seventy (70) per cent in Rural Areas, but it is calculated that Lusaka and Copperbelt consume about Sixty (60) per cent of the nation’s health expenditure living only Forty (40) per cent for the Rural Areas (Planning Unit, 1980). It could be assumed that since more national health budget is spent in Urban Areas, there could be a possibility of reducing illnesses caused by common preventable problems. However, there is no difference
in the prevalence of these conditions. For example, the University Teaching Hospital Statistics for the three (3) year period (1980 - 1982) revealed that mortality rate has increased by (0.5) per cent of total admissions. In an unpublished study conducted at the University Teaching Hospital Paediatric Department, Mwaba (1982) shows that a total of five thousand, seven hundred and one (5,701) children were admitted with Malnutrition between January, 1980 and December 1981 and that one thousand two hundred (1,200) died. The deaths accounted for Thirty to Thirty-three (30 - 33) per cent of total admissions and that Fifteen (15) per cent of the children died within the first twelve to twenty-four (12 - 24) hours of admission. In another unpublished study at the same institution, Chintu's and Watts' (1980 - 81) review of children brought in dead, revealed that Malnutrition was present in over Fifty (50) per cent of children between One and Three years of age, while ten (10) per cent of deaths were caused by Measles.

The purpose of health education is to achieve optimum health for each and every individual which in turn will contribute to the well being of the community. World Health Organisation (Holmes' 1964 p.2) has defined health as "a state of complete physical, mental and social well being of the individual and not merely the absence of disease and infirmity". If clients fail to interpret accurately messages communicated by health education posters, they are likely to suffer from illnesses which will bring human suffering resulting from the disease process and its effects. For example, the consequences of Malnutrition on a child are stunted growth, failure to thrive and low intellectual capacity. Due to these consequences the child is not likely to enjoy the benefits of full life and is thus likely to be an economic burden of the family and society. The consequences of Tuberculosis on an adult include physical suffering from pain, socio-economic suffering on behalf of his family and his
contribution to the community suffers because the individual is absent from work for a long time and his duties are neglected or delegated to an unskilled worker.

In conclusion it could be said that the consequences of clients not interpreting accurately messages communicated by health education posters will affect individuals, family and community as a whole. High morbidity and mortality rates of common preventable problems, the problem of overcrowding in health institutions and repeated admissions to hospitals and health centres from preventable health problems should be major concerns to health workers. The fact that clients may not be interpreting accurately messages communicated by health education posters contributes to the above problems. Besides morbidity and related problems, the consequences of illness on an individual stretch from immediate physical human suffering to the family and community. A sick individual is not likely to contribute fully to his own life, family and the community. This implies that a nation with high percentage of morbidity will have a large population of incapable individuals who may need support in Zambia adding economic strain on the national budget. For example, if many working people in different parts of Zambia are frequently ill or chronically ill, their work will be at a stand still or will be frequently temporarily assigned to unexperienced persons who may not perform such duties adequately. If all these sick workers are put together, they would form a large number of sick population and the work to be done by them will show enormous gaps. This is costly in terms of employment. Employing new workers in the process leads to low productivity in that new workers have to be continually oriented to their jobs. In the same manner, the quality of care being provided by inconsistent and unspecialised personnel would affect the quality
of care given, thus contributing to the economic strain of the country. Therefore, it is important that health workers especially those involved in the production of health educational aids and those in active health education activities should bear in mind that the accuracy with which individuals interpret messages communicated by posters could have a bearing on the crude death rates, infant and maternal mortality rates and life expectancy. This remains the challenge to be critically looked into by all health workers.

Reflecting on the problems discussed in this Chapter, the following hypothesis have been stated in relation to determination of how accurate clients in Lusaka Urban are able to interpret health messages communicated by health education posters:

1. Cultural background of individual clients affect the accuracy with which individuals will interpret messages conveyed by health education posters.

2. Clients who have attained secondary school level of education interpret messages conveyed by health education posters more accurately than clients with primary level of education.

3. Women are likely to interpret messages communicated by health education posters more accurately than men.

4. Posters conveying a single health message are interpreted more accurately than posters with multi messages.
1. RESEARCH DESIGN

A descriptive survey research design was used for the study because the emphasis was on describing clients’ perception and interpretation of three health education posters which are among the health education posters in current use, and the clients’ beliefs, taboos and values pertaining to the information on the three posters. It was also required to describe relevant information on health education from clients and other supportive information necessary in assisting clients to interpret messages communicated by health education posters. The reasons for the choice of this design as an appropriate method of study are that, firstly the method enables the investigator to collect current information about the study. In this case, the investigator obtains current interpretation of the messages conveyed by health posters. Secondly, it was also necessary to control the form and the manner in which information was obtained. Thirdly, information is collected from a variety of subjects who resemble the total group in the characteristics being studied. Fourthly, a descriptive study does not involve experimentation to answer questions (Treece and Treece, 1973). Finally, in descriptive studies the major controls are statistical rather than experimental because surveys tend to study social forces in the field which cannot be manipulated by the investigator (Seaman and Verhonick, 1982).
2. THE RESEARCH SETTINGS

Lusaka consists of 579,148 of Urban population (Census, 1980) which is served by twenty-five (25) health centres and one large health institution—the University Teaching Hospital which is in the Central part of Lusaka. The health centres are situated within the communities of clients for their accessibility. All Government centres are managed by the Lusaka Provincial Medical Officer.

Four health centres namely, Kabwata, Chainama Hills, Chawama and Matero Reference Health centre were selected for sampling of clients. These health centres were selected for sampling because it is assumed that clients attending these centres for ailments and other purposes might have been exposed to health education and also might have come in contact with health education posters. Also, if data were collected at clients' places of work or in their homes, the participants normally assume different roles and responses may be influenced to a certain extent by the role in which the respondents are operating (Polit and Hunler, 1978).

In general all health centres, provide curative and preventive services. However, emphasis in on preventive activities directed toward the components of Primary Health care measures which are maternal and child health services health education, expanded immunization programme, environmental sanitation, safe water supply, nutrition, mental health, community diagnosis, rehabilitation, periodic health check ups of individuals and genetic counselling to promote and maintain the health of individuals, families and communities. Curative activities include active treatment of minor ailments and continuity of care for patients referred from the University Teaching Hospital. Health centres operate on eight hour basis—07.30 - 12.30, 14.00-16.00 hours Monday to Friday.
The health centres open mornings only on Saturday and Sundays for treating minor ailments. However, health centres with maternity services such as Matero Reference Centre operate on 24 hour basis.

The staffing pattern of the health centres on average have one doctor, a sister in-charge or medical assistant in-charge, two medical assistants, two psychiatry nurses, one registered midwife, four enrolled nurses, two nutrition demonstrators, two clerks and two cleaners. The patient turnover on average per month is 14,733. This number of attendances varies from season to season as some health problems are related to seasonal changes. Though there are commonalities among the health centres, still there are some differences in terms of the size, services and the philosophy of the individual health centres. It is therefore necessary to briefly describe the individual health settings selected for sampling.

Kabwe Health Centre is situated in Kabwata area which has a population of 10,226 (Census, 1980). This centre is about 8-kilometers away from the University Teaching Hospital. It is therefore likely that clients attending this centre also utilize University Teaching Hospital. Kabwata is the smallest centre of the four settings selected. Physically, it consists of thirteen (13) rooms numbered accordingly on each door to help clients get into the right places. The rooms include registration room, screening rooms for males adults, children together with female adults, dressing together, drug storeroom, doctors room, injection room, nutrition storage room, room for the in-charge, dirty utility, kitchen and the maternal and child health room. There are also toilet facilities for patients and the staff. Activities of the centre are those outlined earlier in the general similarities of health centres.
The activities directed toward promotion health, maintenance of health and prevention of disease are carried out on daily basis following a systematic time table such as Monday mornings are for antenatal bookings and afternoons for family planning. Tuesday mornings are for antenatal reattendants and afternoons for Postnatal clinic. Wednesday are for children's clinic all day. Thursday mornings are for nutritional health education and afternoons for Moma visiting. Friday, all day for home visits and Saturday is for reports and records. Kabwata Health Centre has two Public Health Nurses. One is a Zonal Public health nurse operating from Kabwata while the other is a clinical teacher from the School of Nursing at the University Teaching Hospital. The latter is responsible for students' experience in Public Health Nursing. This centre though small also serves as a teaching centre not only for student nurses but also for midwives, Post Basic students and Medical students.

Chainama Hill Health Centre is situated in the eastern side of Lusaka about six kilometers away from the University Teaching Hospital. It is built within the grounds of Chainama Hospital which is a mental institution. It serves 1,699 of the population (Census, 1980). The Centre is managed by Chainama College of Health Sciences. It was built for the purpose of teaching medical assistant students, psychiatry nurses and enrolled nurses. Therefore the centre has extra facilities such as laboratory and equipment, examination rooms, classrooms, clinical rooms, and observation rooms, for patients. Likewise it is also staffed to meet the teaching needs of medical assistant students. It also has its own ambulance service.

Matero Reference Health Centre is on the western side of Lusaka about eight kilometres away from the University Teaching Hospital. It is the largest health centre in Lusaka urban and serving the largest community of 39,327 people (Census, 1980). Attached to the centre is a psychiatric
a rehabilitation unit and a maternity unit which operates on 24 hour basis. It also serves as a teaching centre for student midwives, medical assistants, psychiatry nurses and medical students. Necessary human and material resources have been provided to run the centre effectively. It also has its own ambulance service. To meet the demands of the community, some services like maternal and child health are run on daily basis and not weekly like other centres.

Chawama Health Centre is located in the Southern part of Lusaka about six kilometres away from the University Teaching Hospital. It is the second largest health centre in Lusaka Urban serving 34,709 people (Census, 1980). It also has a psychiatry unit and a maternity wing which is not yet in operation. It is also a teaching centre for student midwives, post basic nursing students and medical assistants.

3. PILOT STUDY

A pilot study is defined as a small preliminary investigation of the same general character as the major study which is designed to acquaint the researcher with problems that can be corrected in preparation for the large research project (Tressa and Tressa, 1973). The purposes of conducting a pilot study are that, the study detects problems that might be eradicated before the major study is attempted and makes improvements in the research project such as guidelines on some answers to questions, how much time would be needed for the instrument used and whether clients understand the wording of the questions (Seeman and Verhonick, 1982). In spite of these advantages, a pilot study was not carried out in this study due to time factor in which the study had to be completed and submitted to the Department of Post Basic Nursing of the University of Zambia.
The second reason is that a pilot study is an artificial situation in that it is an experiment which may be difficult to duplicate in another setting. Fourthly, a pilot study loses confidentiality and leads to bias by participants discussing with potential subjects which may affect the major results. Finally, the pilot study is costly (Treece and Treece, 1977).

4. **The Sample**

In view of the time factor, the sample was limited to sixty (60) clients. Subjects were males and females aged between 20 and 50 years who attended the centres for treatment of minor ailments or other purposes. Very ill clients, the physically handicapped such as the blind and the deaf and those below the age of 20 and above fifty were excluded from the sample. It was felt that the very ill clients might not be in a position to give appropriate responses while the blind cannot see the posters which were to be used during the interview, the deaf have a special way of communicating. The category of subjects selected was appropriate because it was felt that they have been exposed to cultures, beliefs, taboos and values which are likely to influence individuals' accuracy of interpreting messages communicated by health education posters. Subjects below the age of twenty were still in the process of both formal and informal education, while the above 50 years of age were in the retiring process, to rural areas and therefore their urban population would be small.

Purposive or quota sampling as it is sometimes referred to was used to select sixty (60) subjects from the four health centre settings. In this procedure the researcher selects some special group because there is some evidence that it is representative of the total population one wishes to study (Treece and Treece, 1983).
In this study the special group was characterized by age, sex, marital status, educational level and occupation. Because of the known characteristics, purposive sampling avoids involving unnecessary characteristics. However, it has advantage of leading to biases. As sampling was to take place from the four health centres, this meant that fifteen (15) clients were required from each centre. Eight males (8) and seven (7) females were to be selected from each health centre, alternating in the number of males and females with each preceding health centre to make the equal number of fifteen (15) per health centre.

Permission for access to clients was requested from the Nursing Officer in charge of Health Centres in Lusaka Province and from the Director of Chainama College of Health Sciences (Appendix A). The purpose of the study was stated and the use of the findings was explained. Due to time factor verbal permission was sought while processing the official letter of request. A written reply granting permission was given (Appendix 2:2).

Individual health centres for sampling were visited a week in advance. Officers in charge were informed of the study in order to gain their cooperation and assistance during data collection. In turn the officers informed the clients of the study. The purpose of the study was explained and subjects were told how the findings would be used in assisting health workers in preparing and producing health education material which would help clients to interpret health messages accurately.

In all four centres subjects were selected from the registration section where every one registers before they are channeled to appropriate areas for attention.
It was explained that only clients who were in a position to participate should volunteer to avoid unnecessary inconveniences on the part of the client. Volunteering meant that clients had an equal chance of being selected within the group with special characteristics.

5. **INSTRUMENT USED TO COLLECT DATA**

The structured interview schedule was used to collect data from respondents (Appendix III). It was felt that the structured interview was appropriate for various reasons. Firstly, the tool could be applied to both literate and illiterate subjects. Secondly, if the interviewee does not understand the questions, the investigator may repeat or reward them for clarity (Treece and Treece, 1977). Thirdly, flexibility can be exercised, and sensitive questions may need establishing rapport with respondents and rephrasing the questions. Lastly, it is possible to obtain a higher proportion of responses from potential candidates. Some of the advantages of the interview schedule according to Treece and Treece (1977 p 199) are as follows:

1. Data from each interview are usable because no items are left blank.
2. Depth of responses can be ensured since the researcher can pursue any questions of interest.
3. Can be used in an exploratory study to find out which questions would be most valuable to include in the questionnaire.
4. A higher proportion of responses are obtained from potential respondents.
5. There is greater flexibility that is provided by the procedures.
6. It allows more opportunity to appraise the validity of the report because the interviewee is present to observe what is taking place such as verbal and non-verbal cues.
7. It is used on both literate and illiterate respondents.
Although the reasons given are valid for the use of the interview schedule, there are some disadvantages attached to it. For example, the interviews themselves are tedious, time consuming and costly (Polit and Hungler, 1978). These might influence the investigator to reduce the number of the sample required in order to avoid incorrect recording of information. Secondly, the presence of the interviewer might influence the respondents' responses (Polit and Hungler, 1978). Khan and Cannel (1967) point out that the influence between the interviewer and the respondent is by no means a one-way process. The relationship is reciprocal with psychological fields of both interviewer and respondent constantly in the process of modification because of cues each one receives from the other.

In order to minimize some of the disadvantages the following measures were taken.

1) The sample was limited to sixty (60) subjects to reduce the time spent on interviews.

2) Interviews with the subjects were to be conducted in 10 - 15 minutes time to avoid boredom and waste of time on the part of the client.

3) Requesting subjects to volunteer for participation helped to reduce bias on the part of the investigator.

4) Rapport was established between subjects and investigator to put the clients at ease.

5) Privacy and anonymity were maintained by the investigator.

Accompanying the interview schedule were three health education posters commonly displayed in health centres and other places. These were:

1) Family planning poster showing the disadvantages of a family which does not practice family planning and the advantages of a family which practices family planning.

2) A poster showing the advantage of vaccinating a child against tuberculosis by using the vaccine B.C.G. during infancy.
3) A poster showing three children with different nutritional status. These are Marasmus child, Kwashiorkor and a healthy child.

All these posters are accompanied by brief explanations in English. These posters were displayed one at a time according to the sequence of questions added per interview schedule.

SEQUENCE OF QUESTIONS

There were thirty-seven (37) questions arranged in a manner that was psychological meaningful to the respondents (Polit and Hungler, 1978). Questions one (1) to six (6) comprised of demographic data concerning personal informative status, education occupation. Questions seven (7) to fourteen (14) introduced respondents to health education. The information was on whether they have heard about health education, what they understand about it, and how and where they were exposed to it and their preference of health education methods used.

Questions fifteen (15) to seventeen (17) were on posters in general which clients might have been across, the type of posters and where they came across them. Questions seven to seventeen aimed at preparing respondents to answer questions that followed on the posters selected for the study.

Questions eighteen (18) to twenty five (25) were on the first poster which is the family planning poster. The eighteenth question looked at the poster and tell the investigator what he/she saw. The nineteenth question asked the respondent the message that he/she got from the poster. Questions twenty (20) to twenty three (23) asked about whether the subjects practiced traditional family planning methods, the type of traditional methods used, who teaches these methods and his/her feelings towards modern family planning methods.
Question twenty-four (24) asked respondents on how the poster can be improved upon in order to assist clients interpret accurately health messages from posters. Question twenty five (25) asked for respondents comments on the poster.

Questions twenty-six (26) to thirty one (31) were on the poster showing the importance of immunizing the baby against tuberculosis. The first two questions sought the same information as that on the family planning poster. The next two questions were directed towards traditional beliefs individuals hold about tuberculosis. Questions thirty (30) asked for respondents’ views on how the poster can be improved upon. Question thirty-one (31) asked for respondents’ comments on the poster.

Questions thirty-two (32) to thirty-six (36) were on the poster showing three children in three different nutritional status - marasmus, kwashiorkor and a health baby. Question thirty-two (32) asked what clients may on the poster. The next question asked the respondent to interpret the message on the poster.

Questions thirty-four (34) and thirty-five (35) were directed toward traditional beliefs and taboos attached to malnutrition. Question thirty-six (36) asked for clients’ views on how the poster can be improved upon. Question thirty-seven (37) asked respondents to comment on the interview itself.

The other method which could have been used to collect data for the study was the questionnaire. It was felt that the study itself needed depth of response and flexibility which the questionnaire could not provide. The other reason is that it was going to be costly to produce 60 copies of each of the three posters.
7. DATA COLLECTION

Data were collected by using the structured interview schedule. This technique is also referred to as participant observation which is characterized by a direct interaction between the server and subjects (Sweeney and Olivieri, 1981p 165). The investigator collected data in mid April, 1984 because during this period and rain season was over and more clients were likely to attend the health centres. Interviews were conducted on Tuesday and Wednesday mornings from 08.00 - 12.00 hours.

At Kabwata Health centre the office of the nutritionist was used for interviewing subjects. At Chawama, the emergency room which was not yet in use was used while at Matero Reference Centre the office of the Public Health Nurse was used. At Chainama Health Centre a classroom built within the centre was used for interviewing. These rooms were examined prior to conducting interviews for any noise interference from staff and unnecessary inconveniences from the workers. Sitting arrangements were prepared in the manner that promotes a feeling of friendliness. Measures were taken to ensure minimal disturbance. The posters which accompanied the interview schedule were arranged on a portable stand in a flip chart form. The stand was at an eye level of the respondent and the investigator placed at a distance from which the subject could see properly. Before the interviews started, subjects were greeted and given a seat. The investigator introduced herself as a University student interested in health related activities and established rapport with the respondent. Before the interview began it was explained to respondents that posters rather than them were being assessed.
One of the problems during the interview was that respondents thought they were being taught health education. The investigator found it difficult to disrupt the interest of some respondents which made the exercise time consuming. Secondly, the translation from English to the local language and then from local to English diluted responses given especially the opinion responses. Thirdly, writing down responses immediately was not possible most of the time. This was to avoid discontinuity of the conversation. Lastly, some respondents though that the investigator was part of the health centre team, and therefore during the interview they tended to bring in their own health problems which again was time consuming on the part of the investigator.

8. LIMITATIONS OF THE STUDY

Due to time factor the sample was limited to sixty subjects. This number is too small to generalize the findings. The instrument could not be pretested, again due to limited time in which to complete the study. Because of time factor again, it was not possible to evaluate more than three posters. Secondly, translation from local to English language and then from local language into English could have an effect on the results by providing inaccurate figures.
CHAPTER 5

PRESENTATION OF FINDINGS

In order to communicate and describe the results of the study more effectively, analytical tables have been used to summarize meaningful results pertaining to the study. The data were analysed manually because the sample was small. The data were tallied and categorized according to the sequence of the interview schedule. Answers to questions on opinion, suggestions and comments have been categorized in appropriate groupings. Each table of responses is grouped into four to six (4 - 6) categories. The tables are divided into three groups in relation to the research question. There are groups A, B and C.

Group A tables present personal information of respondents. Group B tables present respondents' knowledge on health education and Group C tables provide information on respondents' perception, beliefs and taboos and interpretation of three posters (Appendix IV) used with the interview schedule and the general comments on the interviews.
TABLE 1: SEX AND AGE DISTRIBUTION OF RESPONDENTS.

<table>
<thead>
<tr>
<th>AGE IN YEARS</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
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<tbody>
<tr>
<td>20-25</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>25-30</td>
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<td>12</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>30-35</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>35-40</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
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TABLE 2: MARRITAL STATUS OF RESPONDENTS.

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<td>MARRIED</td>
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<td>29</td>
<td>53</td>
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<tr>
<td>SINGLE</td>
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<td>-</td>
<td>6</td>
<td>10</td>
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<td></td>
<td>2</td>
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TABLE 3: HIGHEST EDUCATION LEVEL ATTAINED BY RESPONDENTS.

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<th>EDUCATIONAL LEVEL</th>
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<td>73</td>
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<td>4</td>
<td>12</td>
<td>20</td>
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<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>COLLEGE</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
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<td>30</td>
<td>60</td>
<td>100</td>
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</tbody>
</table>
### Table 4: Respondents' Occupation

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<th>Percentage</th>
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<td>Housewife</td>
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<td>20</td>
<td>33</td>
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<td>Self Employed</td>
<td>8</td>
<td>7</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Clerical</td>
<td>10</td>
<td>-</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Student</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Mechanic</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Unemployed</td>
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<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
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</table>

### Group B Tables

### Table 5: Respondents Who Have Heard About Health Education

<table>
<thead>
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<th>Responses</th>
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<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard about Health Education</td>
<td>23</td>
<td>19</td>
<td>42</td>
<td>70</td>
</tr>
<tr>
<td>Not Heard about Health Education</td>
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<td>11</td>
<td>18</td>
<td>30</td>
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<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
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</table>
### Table 6: Respondents’ Exposure to Health Education

<table>
<thead>
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<th>Respondents</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>Exposed to Health Education</td>
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<td>19</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Not Exposed to Health Education</td>
<td>19</td>
<td>11</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
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### Table 7: Respondents’ Knowledge on Health Education

<table>
<thead>
<tr>
<th>Responses</th>
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<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>Health Living</td>
<td>7</td>
<td>9</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Did Not Know</td>
<td>7</td>
<td>9</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Prevention of Children’s Diseases</td>
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<td>8</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Antenatal Care</td>
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<td>4</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Could Not Remember</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>RESPONSES</td>
<td>MALES</td>
<td>FEMALES</td>
<td>TOTAL</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>DO NOT KNOW</td>
<td>22</td>
<td>11</td>
<td>33</td>
<td>55</td>
</tr>
<tr>
<td>CULTURE AND DEMONSTRATION</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>INDIVIDUAL DISCUSSION</td>
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<td>11</td>
<td>18</td>
</tr>
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<td>ADVERTISING AND PROMOTIO</td>
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<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
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</table>

Table 9: Respondents' preference of methods used in health education.

<table>
<thead>
<tr>
<th>PREFERENCE</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFERENCE</td>
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<td>33</td>
<td>55</td>
</tr>
<tr>
<td>CULTURE AND DEMONSTRATION</td>
<td>1</td>
<td>16</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>RADIO</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>ADVERTISING</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
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</tbody>
</table>

Table 10: Places where respondents were exposed to health education.

<table>
<thead>
<tr>
<th>SPONSORS</th>
<th>MALES</th>
<th>FEMALES</th>
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<th>PERCENTAGE</th>
</tr>
</thead>
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<tr>
<td>NEN</td>
<td>19</td>
<td>11</td>
<td>30</td>
<td>50</td>
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<tr>
<td>HEALTH INSTITUTION</td>
<td>5</td>
<td>15</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>SCHOOL</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>RADIO</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>7</td>
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<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>RESPONSES</td>
<td>MALES</td>
<td>FEMALES</td>
<td>TOTAL</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>HAS COME ACROSS HEALTH EDUCATION POSTERS</td>
<td>25</td>
<td>27</td>
<td>52</td>
<td>87</td>
</tr>
<tr>
<td>HAS NOT COME ACROSS HEALTH EDUCATIONAL POSTERS</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>13</td>
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<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
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</table>

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
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<td>O WHERE</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>SCHOOL</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>OTHER</td>
<td>2</td>
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<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>RESPONSES</td>
<td>MALES</td>
<td>FEMALES</td>
<td>TOTAL</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>POSTER ON MALNURISHED CHILD</td>
<td>11</td>
<td>19</td>
<td>30</td>
<td>50</td>
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<tr>
<td>POSTER ON NUTRITIOUS FOODS</td>
<td>7</td>
<td>9</td>
<td>16</td>
<td>27</td>
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<tr>
<td>POSTER ON EFFECTS OF EXCESSIVE BEER DRINKING</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>POSTER ON CHOLERA EDUCATION</td>
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<td>0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>POSTER ON NEVER SEEN ANY</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
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<td>TOTAL</td>
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### Table 14: Respondents' Interpretation of Family Planning Poster.

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILY ON JOURNEY</td>
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<td>15</td>
<td>25</td>
<td>42</td>
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<tr>
<td>LARGE FAMILY</td>
<td>6</td>
<td>9</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>HEALTH FAMILY</td>
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<td>4</td>
<td>10</td>
<td>17</td>
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<td>10</td>
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<td>POOR FAMILY</td>
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<td>1</td>
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<td><strong>TOTAL</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
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</tbody>
</table>

### Table 15: Number of Respondents Who Practice Traditional Family Planning Methods.

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>25</td>
<td>27</td>
<td>52</td>
<td>87</td>
</tr>
<tr>
<td>NO</td>
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<td>3</td>
<td>8</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
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</table>
### Table 16: Respondents' Recall of Tribe Traditional Family Planning Practices.

<table>
<thead>
<tr>
<th>Categories</th>
<th>MALES</th>
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<th>TOTAL</th>
<th>Percentage</th>
</tr>
</thead>
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<td>Abortion</td>
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<td>27</td>
<td>50</td>
<td>83</td>
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<td>Did not know</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>9</td>
</tr>
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<td>Abstinence</td>
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<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Observing Safe Periods</td>
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<td>2</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
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</tbody>
</table>

### Table 17: Number of Respondents Who Know Modern Methods of Family Planning.

<table>
<thead>
<tr>
<th>Responses</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>Percentage</th>
</tr>
</thead>
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<td>5</td>
<td>17</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 18: Respondents' Recall of Modern Methods Used in Family Planning.

<table>
<thead>
<tr>
<th>Responses</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not know</td>
<td>25</td>
<td>13</td>
<td>38</td>
<td>63</td>
</tr>
<tr>
<td>Pills</td>
<td>5</td>
<td>13</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Loop</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table 19: Persons Who Give Advice on Family Planning Practices

<table>
<thead>
<tr>
<th>ADVISORS</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elders in the Community</td>
<td>23</td>
<td>18</td>
<td>41</td>
<td>69</td>
</tr>
<tr>
<td>Relatives</td>
<td>00</td>
<td>9</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Health Workers</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Did not know</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 20: Respondents' Feelings Towards Modern Family Planning Methods

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces female infertility</td>
<td>25</td>
<td>26</td>
<td>51</td>
<td>85</td>
</tr>
<tr>
<td>Mood follows instructions</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>No idea</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 21: Decision Makers on Practicing Family Planning Methods in the Home

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males only</td>
<td>23</td>
<td>17</td>
<td>40</td>
<td>67</td>
</tr>
<tr>
<td>Males only</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Did not know</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Males and males</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table 22: Comments on the Values of a Large Family

<table>
<thead>
<tr>
<th>Comments</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society's Expectation</td>
<td>10</td>
<td>14</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>High Infant Mortality</td>
<td>9</td>
<td>12</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Economic Value</td>
<td>11</td>
<td>4</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 23: Suggestions Given by Respondents for Improving on the Family Planning Poster

<table>
<thead>
<tr>
<th>Suggestions</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Setting for the Two Families</td>
<td>11</td>
<td>9</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>Translate Explanations into Local Languages</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Poster Accepted As It Is</td>
<td>3</td>
<td>9</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Increase the Family by Two Children To the Health Family</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Exclude The Large Family</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 24: RESPONDENTS' INTERPRETATION OF THE POSTER ON PREVENTION OF TUBERCULOSIS.

<table>
<thead>
<tr>
<th>INTERPRETATION</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN'S CLINIC</td>
<td>10</td>
<td>18</td>
<td>28</td>
<td>47</td>
</tr>
<tr>
<td>NEGLECTED BIG CHILD</td>
<td>15</td>
<td>9</td>
<td>24</td>
<td>39</td>
</tr>
<tr>
<td>IMMUNIZATION AGAINST TUBERCULOSIS</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>HEALTH BABY</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

TABLE 25: NUMBER OF Respondents WHO HAVE PREVENTIVE MEASURES FOR TUBERCULOSIS IN THEIR TRIBES.

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>27</td>
<td>26</td>
<td>53</td>
<td>88</td>
</tr>
<tr>
<td>NO</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

TABLE 26: TRIBAL METHODS USED TO PREVENT TUBERCULOSIS.

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEAR PROTECTIVE CHARMS</td>
<td>20</td>
<td>18</td>
<td>38</td>
<td>63</td>
</tr>
<tr>
<td>ACTIVE TREATMENT OF ANY ILLNESS</td>
<td>7</td>
<td>8</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>DID NOT KNOW</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table 29: Number of Respondents Who Have Beliefs and Taboos Related to Malnutrition.

<table>
<thead>
<tr>
<th>RESPONSES</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>25</td>
<td>30</td>
<td>55</td>
<td>92</td>
</tr>
<tr>
<td>NO</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 30: Respondents' Beliefs and Taboos Related to Malnutrition.

<table>
<thead>
<tr>
<th>BELIEFS AND TABOOS</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early sex when infant is too young</td>
<td>15</td>
<td>12</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Breast feeding during pregnancy</td>
<td>7</td>
<td>11</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Sex outside marriage during infancy</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Non</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Spells</td>
<td>2</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 31: Suggestions Given by Respondents on How to Assist Clients Interpret Accurately the Message on the Poster Showing Malnourished Children.

<table>
<thead>
<tr>
<th>SUGGESTIONS</th>
<th>MALES</th>
<th>FEMALES</th>
<th>TOTAL</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain in local language as well as in English</td>
<td>12</td>
<td>14</td>
<td>26</td>
<td>44</td>
</tr>
<tr>
<td>Add missing foods to marasmus and kwashiorkor children</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Leave poster as it is</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>Separate pictures for individual child</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table 32: Number of Respondents Who Interpreted Accurately the Three Health Education Posters

<table>
<thead>
<tr>
<th>Posters Interpreted Accurately</th>
<th>Did Not Interpret Accurately</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No of Responses</strong></td>
<td><strong>No of Responses</strong></td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td><strong>Females</strong></td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td><strong>Females</strong></td>
</tr>
<tr>
<td>Immunization Against Tuberculosis</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Family Planning</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>WASHIORKOR</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>KARASMUS</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>30</td>
</tr>
</tbody>
</table>

### Table 33: Respondents’ Comments on the Three Posters

<table>
<thead>
<tr>
<th>Comments</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Educative</td>
<td>10</td>
<td>18</td>
<td>28</td>
<td>47</td>
</tr>
<tr>
<td>If Someone Explains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needed for Individual and Public Health Education on Posters</td>
<td>13</td>
<td>10</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>Need Full Time Health Educator for Clients</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Attending Health Centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>
CHAPTER 6

DISCUSSION OF THE FINDINGS, NURSING

IMPLICATIONS, RECOMMENDATIONS,

SUGGESTIONS AND CONCLUSION.

1 DISCUSSION OF THE FINDINGS

The majority Seventy-nine (79) per cent of respondents were 20 – 30 years old. Twenty-one (21) per cent of the sample were aged between 30 and 40 years (table 1). Probably the reasons why the majority of respondents were in the young age group are that this age group has been exposed to modern approach of dealing with health problems whereby one has to consult a health institution. Secondly, this age groups' traditional practices have been influenced by urbanization which has brought in different cultures from different backgrounds. Thirdly, the majority of them have been exposed to formal education which might have influenced their scope of knowledge on the approach to health problems. Fourthly, the males in this age group are in their most productive stages and therefore, are actively involved in their jobs and it is likely that their health problems are attended to at their places of work. It appears females between the age of 20 – 30 years visit health centres more frequently than males and females over 30 years of age. This could be attributed to the fact that this age group falls in the most active productive period of life which is also recognized as a health risk period both traditionally as well as in the modern approach of caring for women in the child bearing age. During this period, this age group frequently visits health institutions for
antenatal, post-natal care, family planning as well as take children for health check ups and necessary immunizations.

All female respondents were married except one who was divorced. In Zambia, all females who have reached puberty are marriageable unless there were other factors such as education which would prevent a female from getting married early in her life. Among male respondents, Ninety (90) per cent were married and the other Ten (10) per cent single (table 2).

The majority Seventy-five (75) per cent of the sample had attained primary level of education. Among the females, Seventeen (17) per cent had grade one primary education and Twenty-three (23) per cent had gone as far as grades 2 to 7. Eighteen (18) per cent had secondary level of education. Eleven (11) per cent males and Seven (7) per cent females. The other Five (5) per cent had no formal education. Lastly, only Two (2) per cent males had college education (table 3). These findings generally revealed that males had attained higher education than females. This difference could be due to the fact that in Zambia girls usually get married at a very early age. These days even the ones who have a chance to be in school are dropping out due to pregnancies. The value of females in contributing to society is viewed in form of marriage and child bearing. Therefore, formal education may not be important to female children.

Table 4 shows that the majority Thirty-three (33) per cent of respondents were housewives, twenty-five (25) per cent were self-employed of which thirteen (13) per cent were females and twelve (12) per cent were males. The other seventeen (17) per cent are employed in clerical jobs, while seven (7) per cent were male mechanics and three (3) per cent males were seeking employment.

Concerning respondents' knowledge on health education, the majority seventy (70) per cent had heard about health education. The seventy (70)
per cent respondents were thirty-eight (38) per cent females and thirty-two (32) per cent males (table 5). The increase in the number of males who have heard about health education could be due to having attained higher educational level than females. They are able to read health messages on the health education posters. Also males are less actively involved in the daily home management and therefore, have time to listen to the radio and read newspapers.

Although seventy (70) per cent respondents had heard about health education, only sixty (60) per cent had been exposed to health education. These were thirty-two (32) per cent females and eighteen (18) per cent males. These findings reveal that more females than males have been exposed to health education inspite of a higher percentage of males who have heard about health education (table 6). The reason could be that females are more frequently in contact with health institutions through maternal and child health services where they are likely to get exposed to health education. It was also found that the most common place of exposure to health education was a health institution. Thirty-three (33) per cent of respondents were exposed to health education in health institutions. Other places included formal schools ten (10) per cent and through radio seven (7) per cent.

Table 7 reveals that twenty-seven (27) per cent of respondents, did not know the meaning of health education, the same number of per cent gave the answer as healthy living which included physical health and environmental sanitation. Twenty-five (25) per cent said health education means taking children to the clinic when they are ill and thirteen (13) per cent viewed health education as attending antenatal clinic and eight (8) per cent could not remember. Generally, females were more oriented to health education than males, although to many,
health education seemed to be associated much more with maternal and child health services only. This is revealed in both males' and females' responses which accounted for thirty-eight (38) per cent. Perhaps too much emphasis has been placed on maternal and child health services in an effort to combat the high incidents of infant and maternal morbidity and mortality which was and is still a concern to health authorities. May be other measures to promote and maintain health are not given much attention.

Table (8) shows that fifty-five (55) per cent of the sample did not know the methods used to disseminate health education. Twenty-five (25) per cent mentioned the lecture and demonstration methods; Eighteen (18) per cent mentioned individual advice and two (2) per cent said reading and listening to the radio. Apparently none of the respondents mentioned health education posters.

The respondents who knew methods of disseminating health education said they preferred a combination of lecture and demonstration methods to learn health education. They said when a lecture is followed by a demonstration, they do not forget easily and it is easy to put what was taught into practice. Ten (10) per cent of the sample preferred listening to the radio because it was relaxing. The next group were those who preferred reading seven (7) per cent. Their main reason for this preference is that they could refer back to the written news or booklets if need arises. These findings suggest that females value didactic and action methods of learning because of their role in the homes and the low level of education. They may not pay attention to reading news items concerning health related matters or listen to the radio.
Fifty (50) per cent of respondents had not been exposed to health education in any place. The majority thirty-three (33) per cent had been exposed to health education in health institutions. Other respondents had been exposed to health education at school. The other seven (7) per cent had been exposed to health education through listening to the radio. These findings reveal that more females knew the places from which they were exposed to health education than males.

With regard to respondents' contact with health education posters, (table 11) eighty-seven (87) per cent of which females were the majority had come across health education posters, while thirteen (13) per cent of which the majority were males had not been in contact with health education posters.

The majority seven-five (75) per cent first came across health education posters at health centres (table 12). Fourteen (14) per cent said they had not come across health education posters anywhere. The other eight (8) per cent came across the posters at school. Other places which included community development centres, voluntary organisations such as Young Women's Christian Association were given by three (3) per cent.

Following information on respondents' contact with health education posters, respondents were requested to recall health education posters they had seen, (table 13). Fifty (50) per cent recalled a poster which shows a malnourished child, twenty-seven (27) per cent recalled a poster showing nutritious foods and how they can be combined to provide a balanced diet, twelve (12) per cent of which ten (10) per cent
were males recalled a poster on excessive drinking, six (6) per cent males only did not recall any. This information shows that females recalled posters related to nutrition because of their exposure to health education at the Children's Clinics, Antenatal and Postnatal Clinics. Also it is easier to recall these posters because they are related to their responsibilities in their own homes. Males recalled posters on excessive drinking because it is likely that these posters could have been displayed in their places of work since it is quite common that males could be reporting drunk on duty. Those who recalled the poster on Cholera three (3) per cent said they had been actively involved when there was an outbreak of Cholera in the areas they had been working, while two (2) per cent saw a poster when they visited the hospital.

After respondents had recalled the health education posters they had seen, subjects were asked to tell the investigator what they saw on the poster before the, and state the message they got from the picture. On the family planning poster (table 14), four-two (42) per cent saw a family on a journey, twenty-five (25) per cent saw a large family, seventeen (17) per cent saw a healthy family, ten (10) per cent saw a village family and six (6) per cent saw a poor family. These figures reveal that eighty-three (83) per cent of the sample noticed only the picture showing many children. This picture was significant to many respondents because large families are very common in Zambia and probably couples with many children are envied. A large family is regarded as an asset to the couple. The seventeen (17) per cent who identified the poster as showing 2 families were those who had secondary education ten (10) per cent were males and seven (7) per cent
were females. These were able to read the poster. In general the majority did not get the intended message which was being conveyed by the poster.

Eighty-seven (87) per cent of the sample said they practiced traditional family planning methods in their tribe (table 15). Among the thirteen (13) per cent who do not have traditional methods of family planning, eight (8) per cent were single males and five (5) per cent were females who had just been married and were in the family way.

Table 16 indicates the various traditional methods respondents use in their tribes. Eighty-three (83) per cent mentioned protective charms worn by females, seven (7) per cent single males said that they did not know any traditional methods, five (5) per cent practiced abstinence and three (3) per cent females practiced observation of safe periods. Nobody mentioned any methods used in modern family planning.

Respondents were required to name modern methods used in family planning. Sixty-three (63) per cent did not know (table 17). The other thirty-seven (37) per cent of which females were the majority knew the methods used in modern family planning (table 18). Twenty-two (22) per cent among the thirty-seven (37) per cent subjects who knew modern methods of family planning mentioned Pills and seven (7) per cent females mentioned Loops (table 18). The findings from tables 14, 15, 16, 17, 18 and 19 show that although there has been extensive health education on modern methods used in family planning, the majority of respondents did not know the methods. The few who knew these methods said they do not use them. This implies that even the few who had been exposed
to health education on modern methods used in family planning have not changed their attitudes towards modern methods used in family planning (table 20). In the 6 tables relating to family planning the females seem to be better oriented in this area than males. This could be due to the fact that naturally the females have to bear the burden of childbearing and rearing, therefore, they are traditionally advised on measures to avoid unwanted pregnancies. They also seem to be more knowledgeable than males on modern methods used in family planning because of frequent exposure to health institutions.

Interesting enough, table 19 shows that the majority of the sample sixty-nine (69) per cent were given advice on family planning by the elders in the community. Fifteen (15) per cent females only mentioned relatives such as grandmothers, aunts, sisters and cousins. Eight (8) per cent mentioned health workers. These findings again reflect that health education in this area might have not been effective probably due to reasons neglected in respondents' feelings towards modern family planning (table 20). Many of them eighty-five (85) per cent felt that methods used in family planning reduce female fertility. Twelve (12) per cent said they have heard from friends who have practiced modern methods that the methods are good if one follows instructions. But they commented that they themselves have not tried because of fear of reducing fertility. With this information, it is possible to associate fertility with a large number of children. May be this was the reason why most subjects were able to identify the large family which was not practicing modern family planning methods (table 14). It seems a large family is associated with fertility.
Table 21 reveals that most males in the sample thirty-eight (38) per cent felt that females were responsible for practicing family planning. Thirteen (13) per cent of males and females said only males were responsible for practicing family planning, while the other thirteen (13) per cent were not sure and seven (7) per cent felt that couples were responsible for planning their own families. If the majority of respondents felt that women are responsible for practicing family planning, then males will not pay much attention to health education messages on family planning because they feel that is is not their responsibility. Perhaps that is why females seem to be more knowledgeable in family planning practices.

Table 22 shows that the majority of respondents forty (40) per cent commented that traditionally a woman is expected to have as many children as possible. This is one of her major roles in society. Thirty-five (35) per cent felt that if they have few children and some happen to die they would be left with very few or none. This would mean that couples will not have anybody to assist them in their old age. Therefore, strong negative attitudes towards modern family planning methods are likely to be more pronounced in females than males. This again could be the reason why a large family on the poster was more easily identified than the small size family. The remaining twenty-five (25) per cent said a large family is necessary for economic reasons especially in rural areas where cultivation of fields calls for a joint effort.

Nevertheless, subjects (table 23) felt that the poster would do with some improvement. Thirty-three (33) per cent felt that a home setting for each of the two families including a house and surroundings would
probably assist clients in interpreting the poster accurately. Twenty-five (25) per cent said the main handicap was the language in which explanations were written. It was felt that the writing on the poster should be translated into various languages. Twenty (20) per cent accepted the poster as it is. Among the twenty (20) per cent were those respondents who had attained the highest level of education. These were able to read, write and understand English well. Twelve (12) per cent felt that the family which is shown as practicing modern methods used in family should have an addition of two more children so that they are four in all. They gave the reason that the two children appearing on the poster gave the impression that couples should only have two children and no more. The last ten (10) per cent suggested exclusion of the large family because it drew more attention to observers overshadowing the information that is supposed to be conveyed. They also said that the two family pictures appeared to be separate with no correlation of messages. These suggestions show that clients are interested and ready to receive health education information if the messages were conveyed appropriately.

The other poster used was on the prevention of Tuberculosis. The majority (table 24), forty-seven (47) per cent said the poster was showing activities of the children's clinic. Thirty-nine (39) per cent saw a neglected big child, nine (9) per cent interpreted the message correctly, they said the child was being immunized against Tuberculosis. These subjects had attained Form V level of secondary education. The other five (5) per cent interpreted the poster as showing a health baby. This means that only nine (9) per cent of respondents interpreted the poster accurately. On preventive measures for Tuberculosis in respondents' tribes (table 25), eighty-eight (88) per cent said they
had traditional preventive measures against Tuberculosis, and twelve (12) per cent had none. Responses on trive methods used to prevent Tuberculosis (table 26), showed that sixty-three (63) per cent of respondents said protective charms were worn by children to some parts of the body, usually around the neck. Twenty-five (25) per cent said that active treatment of any illness in a child was done. Twelve (12) per cent did not know. These results show that traditional concept of disease preventing measures still prevails. No respondent mentioned immunizations carried out in health centres as means of preventing Tuberculosis.

When the message being conveyed by the immunization poster was explained and interpreted (table 27), thirty (30) per cent felt that translation of explanations accompanying the pictures should also be in local languages for clients who cannot communicate in English. Another thirty (30) per cent felt that the picture of the baby showing immunization should be enlarged because it is showing the primary steps in the prevention of Tuberculosis. Twenty-three (23) per cent suggested that the pictures on the poster should be arranged in sequence of events. Seventeen (17) per cent felt that the picture of the baby should be excluded from the poster. These suggestions show that clients are interested in health education and if appropriate channels are used to convey the messages, clients would interpret the health messages accurately.

The poster on malnourished children which has received extensive publicity and health education had varied responses (table 28). Forty-seven (47) per cent of the respondents interpreted the malnourished
child as a thin and neglected child. Forty (40) per cent saw an ill child. The illnesses included skin disease such as leprosy, generalized oedema and ascites. Eight (8) per cent saw a child with protein calorie malnutrition. Five (5) per cent of the eight (8) per cent respondents were females with primary level of education who had had health education on malnutrition and three (3) per cent were females with secondary education. The three with secondary education learnt about malnutrition at school. Five (5) per cent males thought the child with Kwashiorkor had paralysis. On the whole, females had a better insight on the poster showing malnutrition children than males. However, the majority did not interpret the poster accurately. The eight (8) per cent correct responses all came from females. Earlier in the discussion, (table 13) shows what fifty (50) per cent of the respondents recalled a picture of a malnourished child. In contrast, only eight (8) per cent interpreted the poster accurately. This could be due to the fact that inspite of extensive publicity, learning has not taken place among clients.

The findings also revealed that ninety-two (92) per cent (table 29) of respondents had beliefs and taboos related to malnutrition and eight (8) per cent had none.

In review of the respondents' beliefs and taboos related to malnutrition, forty-five (45) per cent (table 30) said malnutrition is a result of early resumption of sex by the couple when the infant was still too young (6 - 18 months), thirty (30) per cent believed that breast feeding during pregnancy caused malnutrition to the child who was being breast fed. Ten (10) per cent believed that sex outside marriage
by the mother when the baby is young leads to malnutrition. Seven (7) per cent believed in spells being cast on the affected child and the eight (8) per cent who had no beliefs were single males who had no families yet.

Following the explanation of the poster and its interpretation (table 31), forty-four (44) per cent suggested that the poster should be explained in local languages as well as in English. Twenty-three (23) per cent felt that if required foods were added to each picture showing a Marasmus and a Kwashiorkor child, it would help to interpret the poster accurately. Eighteen (18) per cent felt that the poster should not be changed. These were respondents who were able to read and understand the explanation in English. The remaining fifteen (15) per cent suggested that the pictures of a marasmic and kwashiorkor children should be on separate posters. These suggestions show that in spite of beliefs and taboos related to malnutrition, clients are interested in learning new ways of looking at nutritional problems if messages could be communicated in ways that would be meaningful to them.

Reflecting on research question: How accurate are clients interpreting health messages communicated by health education posters commonly displayed in the health institutions in Lusaka urban? The findings reveal that there was a difference in the degree of responses within the three health poster used in the study. The highest most accurate responses were from a poster showing a marasmic child (table 32). The second in the highest responses was on the family planning poster followed by the picture of a kwashiorkor child and the least interpreted picture was the poster which showed the advantages
of immunization against tuberculosis during infancy. In general the majority did not interpret the health messages accurately. The high responses on the marasmic poster could be due to the fact that nutritional education and surveillance has been extensive, not only by health workers but also in conjunction with other health related programmes such as community development projects and functional literacy. The reasons that kwashiorkor poster was poorly interpreted could be due strong beliefs and taboos that are related to this condition this applies to the poster on immunization against Tuberculosis as well. Reflecting to reasons for higher responses in the family planning poster could be again attributed to the majority of females who are frequently exposed to health institutions for the maternal and child health services. There could be other contributory factors to the high percentage of respondents who were unable to interpret health messages accurately. One of them could be age. The majority of respondents were between 20 and 30 years old (table 1). The majority in this group especially males are actively involved with their jobs and, therefore, may pay little attention to health related information. When they have minor health problems, they are attended to at their places of work where they may not receive health education not related to their work situation. The second factor contributing to subjects' inability to interpret the posters accurately is the educational level of respondents, (table 3) findings revealed that the majority of respondents had attained primary level of education which had not equipped the clients to read and understand posters explained in English. This has supported hypothesis number two (2) states that clients who have attained secondary level of formal education are likely to interpret health messages conveyed by health education posters more accurately than clients with primary level of education. In addition, respondents
suggested that the writing on the posters should be translated in local languages which again has supported the reason for subjects' inability to interpret the messages accurately. The third factor is exposure to health education. The findings revealed that the majority of respondents have not been exposed to health education. Among those who had been exposed to health education, the females were in majority. The ones who have been exposed to health education had some knowledge on what health education is and were able to recall methods used in health education as well as recall more health posters they have come across than males. Women had a fair idea of the messages on health education posters than males. This finding supports hypothesis number 3 which states that women are likely to interpret messages communicated by health education posters more accurately than men because they are in contact with health institutions more frequently than males.

The fourth factor could be beliefs and taboos related to health problems. This was revealed in the questions related to modern methods used in family planning and malnutrition. On the family planning poster, the attitudes and beliefs of respondents towards modern family planning were more convincing to respondents themselves than the advantages given for the use of modern family planning practices. This also reflected on the beliefs and taboos related to malnutrition.

The last factor could be the arrangement of pictures on the posters. All posters had more than one picture. Respondents only perceived what was related to their experiences. For example, on the family planning poster, the majority of respondents said the picture showed a large family and not
This is because a large family in Zambian culture is the ideal. On the immunization against Tuberculosis poster, the majority saw a baby being immunized because this is what is normally done in the health centres. The big boy with Tuberculosis who was the focus for the message was not seen. On the malnourished children, most respondents saw a health child but did not associate this child with the other two. This supports hypothesis number which states that posters conveying a single health message are interpreted more accurately than a poster with multi messages. Suggestions were made to remove some pictures and only leave the picture on which the message is based. This shows that multi messages pictures could lead to misinterpretation.

Generally, the sample was too small to make generalization to the total population who attend health centres in Lusaka Urban. Comments on the interview as a whole (table 32) showed that the majority, forty-seven (47) per cent expressed that posters can be very educative if there were explained in appropriate languages. Thirty-eight (38) per cent felt that there was need for individual and public education on posters being displayed. Fifteen (15) per cent suggested a full time health education to be attached to health centres and places of work (table 32).

In conclusion, it could be said that the majority of respondents did not interpret accurately the health messages being conveyed by the posters due to factors such as education level, little knowledge on health education, beliefs and tabbors and inappropriate design of the posters. However, the findings revealed that respondents are interested in new ways of solving health problems and therefore, the challenge remains with the health workers.
2 NURSING IMPLICATIONS

The findings of the study revealed that most respondents did not interpret the three health education posters accurately regardless of whether they were illiterate or not, this was especially evident with the family planning poster and the poster showing immunization against Tuberculosis. This implies that the objectives of family planning to promote and maintain health would not be met as well as reduction of incidents of Tuberculosis.

Regarding the family planning poster, most respondents expressed strong feelings about traditional practices. Generally in Zambia large number of children are regarded as assets for future investment. In view of traditional family concept the message on the modern family planning as it stands tends to contradict the traditional value of having a large number of children. The intended message on the poster is that spacing childbirth implies having a small number of children. This implies that the present family planning poster must be improved in a way that would be culturally accepted.

The posters used in the collection of data had more than one picture. It was observed that most respondents recognized only a single picture from each of the posters which they said they had seen before. This recognition of single pictures from multi-picture posters could be interpreted to mean that respondents selected information which was most meaningful to them based on their past experience. For example, on the poster showing advantages of immunizing against Tuberculosis, a small picture showing a baby being immunized was more frequently
recognized than the picture showing the effects of Tuberculosis on a boy in a large picture (Appendix 4) who is the focus of the message. This implies that probably a single picture on the poster would be more noticeable and would convey the intended message better than the multi picture poster.

The malnutrition poster was better interpreted. This could mean that a lot of time had been spend in this area and clients were able to recall what they had learned. However, malnutrition is still among the top (10) leading causes of morbidity and mortality rates in Zambia. This could be due to the fact that stereotype of learning had taken place among clients who had been exposed to health education. If this is the case, new approaches to teaching clients should be looked into. It was also revealed that there were strong beliefs and taboos related to malnutrition. Taboos and beliefs play a major role in making the individuals conform to the norms of the society. While recognizing their value in a society, they can be a stumbling block to health education. Therefore, new ways of teaching to modify some of the traditional taboos and beliefs hampering the effects of modern education should be sought.

From the findings most of the respondents were illiterates or semi literate. This contributed to clients' inability to interpret health messages communicated by the three health education posters with accuracy especially in the cases where all posters had words written in English. This meant that clients did not receive the written message and as a result were unable to interpret the message. On the other hand, some of the literate respondents were not able to interpret health messages accurately. This indicates that there is
generally poor perception of messages pictorially communicated in the posters. Therefore, there is need to redesign the posters. It was also evident that males were more literate than females. Nonetheless the majority of males had not been exposed to health education. The females however, who are the majority of illiterates, because of the nature of roles, they were much more exposed to health education than the males. It is important, therefore, that health education in places of work be introduced to expose males to modern health practices, not only concerned with their occupation, but also with other health aspects relating to the three levels of prevention.

On the knowledge of health education among the respondents, the majority of the males in the sample had little knowledge on health education which was mostly related to maternal and child health services. This indicates that there is need to expose both males and females to other aspects of health education other than the maternal and child health service oriented education which has been a measure taken in an effort to reduce the high maternal and mortality rates which have been of great concern in Zambia, a man is an influential person in the family therefore, if he is exposed to health education he could foster the practices of health education posters in providing essentials for appropriate health practicing measures.

In view of these findings different approaches must be studied which will effectively assist clients to interpret health messages accurately and look at health education in a broader sense to promote and maintain health. In order to achieve the objectives of health education, in the field of health education, health workers must move
from disease oriented approach to health promotion, health maintenance, disease preventing measures and rehabilitation. In order to provide care of quality, health education must look at the existing trends in nursing practice, management, education and research which will give direction to the provision of quality care.

3 RECOMMENDATIONS

As stated in the previous discussion, quality care embodies nursing practice, administration, education and research. The following are recommendations related to the four components of nursing which form the basis for providing quality care in the field of health education.

3:1. Nursing Practice

i) All health education posters in current use must be evaluated for their effectiveness.

ii) The public must be educated on common health problems and on the posters in current use. Therefore no client should leave a health centre without any advice on health measures. However, precautions should be taken to ensure that the advice is given to the right person at the right time and place by the right person.

iii) Home teaching using a variety of methods must be intensified through home visits not only for follow up of discharged patients but visits for families without obvious health problems.

iv) There should be frequent appraisals of the community to diagnose health problems. Use of a variety of teaching methods such as community participation, and posters should be implied.

v) There should be introduced broad health education at places of work to expose males to health education practices directed not only at their occupation, but also to the three levels of prevention given in the Chapter on operational definitions.
vi) The concept of primary health care must be assessed to determine the extent to which it could be utilized in health education.

vii) Health workers must be educated on skill in communication and concept of perception so that they can conduct health education without biases.

viii) Health workers should actively participate in clinical areas other than managerial functions. For example, plans can be made in such a way that health worker in a managerial position can visit a number of health centres with specific objectives. He/she can physically participate in duties such as maternal and child health services, home visiting community diagnosis carry out research projects such as devising various ways of preparing infant foods, growth pattern of Zambian children and effective ways of teaching individuals.

3:2. **Nursing Management**

i) All levels of management must formulate policies regarding activities of health education. For example, in the geographical demarcation it should be stated that the population within a demarcated zone falls under the health worker in charge. This policy would give a right of the officer in charge to plan preventive health of various special populations such as industries, schools and also appraise the activities of the private surgeries.

ii) Planning of staff, maternal and financial resources bearing in mind the policy and objectives of the management.

iii) The management should collaborate with other health related agencies to avoid duplication of work and save human and maternal resources.

iv) Evaluation procedures for the community should be established.

v) Follow up community activities.

vi) Compile statistical data and disseminate information.

3:3. **Nursing Education**

All health workers to be oriented to principles and practice of health education through

i) Inservice education
ii) Staff development

iii) Continuing education.

3:4. Nursing Research

Nursing research should be part of activities in health education to explore and solve problems relating to health education.

4. SUGGESTIONS

i) The study should be carried out on a large scale so that the findings can be generalised.

ii) A study on the utilization of health educators in health centres should be carried out.

iii) A study to explore the attitudes of males towards modern family planning methods should be carried out.

iv) One of the three health education posters used in the study should be redesigned based on the suggestions and then carry out a pilot study to determine its effectiveness. (see appendix 3, 4 and 5)

v) Design of posters to include traditional attitudes and beliefs.
The study on how accurate clients interpret health messages communicated by health education posters has looked at pertinent factors that are likely to influence individuals' interpretation of health messages. The findings have revealed that educational level, experience, cultural background, beliefs, values, attitudes and taboos and some of the factors affecting the accuracy with which individuals are likely to interpret health messages.

It was also observed that the majority of respondents were less knowledgeable on the concept of health education especially among the males because they are less frequently in contact with health institutions. Generally most respondents did not interpret health posters accurately probably due to factors mentioned which are related to the background of individuals including philosophy education, perception of health practices and means of communication.

The implications highlighted on the responsibility of health workers to redesign posters and seek new ways of imparting health messages to clients so that they can be assisted to interpret health messages accurately. The four components of nursing namely practice, administration, education and research should work jointly in an effort to seek new or improve on existing methods of imparting health knowledge to the public.
Post Basic School of Nursing
School of Medicine
P.O. Box 50110
LUSAKA

24th June, 1984

The Principal Tutor
Chainama College of Health Sciences
P.O. Box 3399
LUSAKA

Dear Sir,

re: PREMISSION FOR RESEARCH PROJECT

I am a student currently enrolled in the Bachelor of Science in nursing programme at the University of Zambia.

This programme requires a research project in the area of the student's speciality. The research has to be submitted to the faculty at the end of the academic year.

My area of speciality is Community Health Nursing. I am interested in finding out how accurately clients interpret the health messages communicated in health education posters displayed in most health institutions and most organisations and public places.

It is hoped that the findings will help health educators to critically analyse how they utilize the posters when conducting health education. It is also hoped that it will help health workers especially those involved in developing educational aids to improve on available posters and the ones to be developed by taking into consideration this aspect of their job.

I am therefore requesting for permission to interview clients seeking medical help at Chainama health Centre from the second week of March, 1984 to April, 1984. The information obtained will be for my own use and will be kept in strict confidence.

Thanking you in anticipation.

Yours faithfully,

M K Chintu (Mrs)

c.c. Head of Post Basic Nursing Dept

" Miss P. Chibuye, Lecturer & Co-ordinator in Nursing Research Course
Appendix 2.1
PMOLP/9/7/1

Ministry of Health
Office of the Provincial Medical Officer,
P.O. Box 37136
LUSAKA.

16th March, 1984

Mrs. M. K. Chintu,
Post Basic School of Nursing,
School of Medicine,
P.O. Box 50110,
LUSAKA.

I refer to your letter dated 8th March, 1984.

I have no objection for you to carry out the research in question at Matero Reference Health Centre, Chawama and Kabwata. Please report to the Doctors of Public Health Nurses at each of the health centres and present this minute to them so that they can allow and assist you in your research work since I did not have time to communicate to them.

Please ask for anything and we will assist whenever possible.

I would just like to get a feedback for my own curiosity on your research and of course for improvement in the health centres.

Chainama is under the School of Health Sciences at Chainama.

Thank you.

For/PROVINCIAL MEDICAL OFFICER
LUSAKA PROVINCE
APPENDIX III
FOR OFFICIAL USE ONLY

STRUCTURED INTERVIEW SCHEDULE

1. Sex:
   Male
   1
   Female
   2

2. How old are you?
   1
   2
   3
   4
   5
   6
   7
   8
   9
   10

3. What is your marital status?
   1
   2
   3
   4
   5
   6
   7
   8
   9

   Have you had an opportunity to attend formal education?
   Yes
   1
   No
   2
   11

4. How far did you go in your education?
   12
   13
   14
   15
   16
   17
   18

5. What is your occupation?
   18
Have you heard about health education?

Yes
1
No 2

What does health education mean to you?

Have you been exposed to health education?

Yes
1
No 2

How were you exposed to it?

Do you know any method used in health education?

Yes
1
No 2

What are they?

Which method do you prefer?
1. What are the reasons for your preference?

2. Have you come across any health education posters?
   Yes
   1  
   No 2

3. Where did you come across them?

4. Which health education posters have you seen?

   POSTERS
   I FAMILY PLANNING POSTER

   Please look at the poster and tell me what you see on it.
9. What health message do you get from the poster?

10. Do you practice any family planning methods in your tribe?
    Yes
    No

11. What methods are used?

12. Who teaches methods of family planning in your tribe?

13. What are your feelings towards modern family planning methods?

14. How can this poster be improved upon in order to assist clients interpret health messages accurately?

15. Have you any comments to make on this poster?
II POSTER FOR IMMUNIZATION AGAINST TUBERCULOSIS

26. Please look at this poster and tell me what you see on it.

27. What health message do you get from the poster?

28. Are there any methods used in your tribe to prevent tuberculosis?

   Yes
   1

   No 2

29. What are they?

30. In what way can this poster be improved upon in order to convey the message to the clients accurately?

6.........
31. Have you any comments to make on this poster?

88
89
90
91

III POSTER SHOWING THREE CHILDREN

1. Child with marasmus

ii. Child with protein calories malnutrition

iii. A health child

32. Please look at the poster and tell me what you see.

92
93
94
95

33. What message is the poster conveying to people who come across it?

96
97
98
99

34. Do people in your tribe have any beliefs and taboos related to the condition?

Yes

1

No

2

100

35. What are they?

101
102
103
103

7 .........
36. How can this poster be improved upon to help clients interpret health messages accurately?

37. Have you any comment to make on health education posters as a method of teaching health education?

Thank you for your time.
PRACTISE FAMILY PLANNING

WHAT HAPPENS WHEN YOU PRACTISE FAMILY PLANNING?
1. IMPROVED LIVING CONDITIONS.
2. PREVENTION OF UNWANTED CHILDREN.
3. REDUCED RISKS OF ABORTION.
4. IMPROVED HEALTH OF WOMEN AND CHILDREN.
5. HAVING TIME TO LOOK AFTER EVERY CHILD PROPERLY.
6. IMPROVED EDUCATIONAL OPPORTUNITIES FOR CHILDREN.

ASK YOUR CLINIC STAFF OR DOCTOR FOR INFORMATION OR WRITE TO LUSAKA RESPONSIBLE PARENTHOOD PROJECT Box 50255, LUSAKA
WHY T.B.

GIVE B.C.G.

PROTECT YOUR CHILDREN
<table>
<thead>
<tr>
<th>MARASMUS BABY</th>
<th>KWASHIORKOR BABY</th>
<th>HEALTHY BABY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough food</td>
<td>Not enough body-building foods (proteins)</td>
<td>Enough good foods</td>
</tr>
</tbody>
</table>
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