

COMMUNICATION STRATEGIES USED IN COMBATING AND
PREVENTING MALNUTRITION:
A CASE STUDY OF THE MATERNAL AND CHILD CLINIC AT
CHAINAMA HILLS HOSPITAL, LUSAKA

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Mary Chintu-Chilele

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Submitted in partial fulfilment of the degree of Master of Communication For
Development offered by the Department of Mass Communication,
University of Zambia

December 2004



DECLARATION

I declare that this attachment report has not been submitted for a degree in this or any other University.

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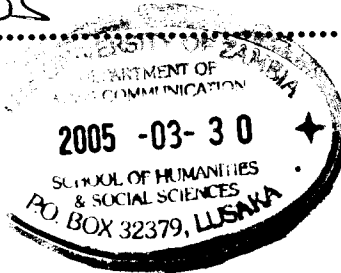
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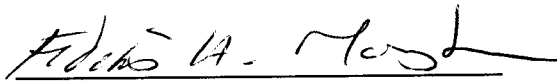
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Approval

This Research Report of Mary Chintu Chilele has been approved as fulfilling the partial requirement for the award of the degree of Master of Communication for Development (MCD)

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ABSTRACT

This report provides an account of the experiences and observations made during the practical attachment carried out by the researcher ending December 2004. The aim of the attachment was to gain experience in the communication strategies used to combat and prevent malnutrition at Chainama Hills Hospital at the Maternal and Child Health Clinic in Lusaka. It was also meant to afford the student an opportunity to learn about and contribute to the communication processes and strategies used by the clinic.

The report reviews the communication strategies used by the communicators. It also discusses the perceptions the mothers who attend the maternal and child health clinic have on the nutrition education provided at the clinic. It further discusses the major influencing factors for the decisions mothers take in adopting any new nutritional innovations and also finds out whether information provided at the clinic is used or not, and, if used, the purpose to which it is put. The report also discusses the health and nutrition communicator's role in designing the messages. It also discusses the causes of malnutrition and ways of combating and preventing malnutrition as viewed by the mothers of children brought to the clinics.

This report is expected to enlighten the health personnel on the perceptions their clients have on malnutrition and the nutrition education provided so that they can adjust their approaches so that they are better appreciated. Lastly, the message designers are also expected to draw a number of lessons from the report so they can design better messages for their clients and use the strategies best appreciated by the clientele.

ACKNOWLEDGEMENTS

Sincere gratitude to Mr. Fidelis Muzyamba my supervisor, whose tireless guidance, advice and encouragement made the writing of this report possible. To all the lecturers, Dr. Kasongo, Mr. Nkunica and Mr. Makungu who taught me during the first year of this programme and gave me a rich solid foundation on which I built this research, I say, many thanks to you. Thanks to the Ministry of Health, Lusaka District health Management Board for allowing me access to Chainama Hills Hospital, Maternal and Child Health Clinic. Thanks, too, to Chainama Hills Hospital, Maternal and Child Health clinic for allowing me to interview their clients-the mothers who visited that clinic and the nurses and nutrition personnel who work in the clinic without whose cooperation my research would have not been possible. I wish to also thank Martha Mbewe for being dependable and always there for me when I needed her. In addition, I also wish to thank the rest of the MCD class in particular Ba Henry Kaimba, Tobias, Chitalu and Bruce, for their support and encouragement during the trying moments of the programme, I owe you a lot guys. I also wish to thank Bonaventure for being there always to run several errands for me during the report writing period. I wish to thank the secretarial and technical staff of the Mass Communication Department for their support and encouragement. Lastly, but not the least, I wish to thank Mrs. Wendy Nyangu, Mrs. Dorothy Kasanda, Ms. Josephine Kambikambi, Mr. Katambala, Mr B. Chisonta and all those who contributed in one way or another to the successful completion of the MCD programme.

Mary Chintu-Chilele

University of Zambia.

December, 2004.

DEDICATION

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FIGURE LIST

- Figure 1:** KAP: the educational process.
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ABBREVIATIONS

CSO	-	Central Statistical Office
FAO	-	Food and Agriculture Organisation
GRZ	-	Government of the Republic of Zambia
HEU	-	Health Education Unit
KAP	-	Knowledge, Attitude, Practices
MCD	-	Master of Communication for Development
MCH	-	Maternal and Child Health
MOH	-	Ministry of Health
NFNC	-	National Food and Nutrition Commission
SPSS	-	Statistical Package for Social Science
UNDP	-	United Nations Development Programme
ZDHS	-	Zambia Demographic Health Survey
ZEN	-	Zambia Enrolled Nurses
ZEM	-	Zambia Enrolled Midwife
ZRN	-	Zambia Registered Nurse
ZRM	-	Zambia Registered Midwife

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CHAPTER 1

BACKGROUND

1.0 Introduction

This report is an account of the practical attachment carried out at Lusaka's Chainama Hills Hospital Health Management Board, Maternal and Child Health Clinic. The Maternal and Child Health Clinic is one of the clinics at the hospital. The main objectives of the clinic on which the study was carried out is: to give nutrition education to parents and guardians that go to the clinic; to counsel parents/guardians with undernourished children who go to the clinic and to give out (High Energy Protein Supplement (HEPS) foods, mealie meal, beans and oil when available to parents/guardians to support children who are undernourished.

The children's health is monitored from the age of 6 weeks to five years by the Maternal and Child health nurses and nutritionists on a monthly basis. The attachment afforded the student an opportunity to learn and contribute to the communication processes and strategies used by the health system and Chainama clinic in particular to prove the sentiments of Seshadri (1987) who said 'it is becoming increasingly clear that gain in knowledge may not necessarily lead to change in practice. As such, to transmit messages successfully, there should be a critical consideration

of the message content, target audience, channels of communication and communicability of the message.'

1.1 State of malnutrition and nutrition interventions

Combs et al (1995) argued that malnutrition was not a problem of the poor, developing nations like Zambia only, but it was a global issue of concern and indicated that malnutrition continued to affect nearly half of the world's population. It was estimated that more than 840 million people did not access enough food to meet basic daily needs and more than one third of the world's children were stunted due to diets that were inadequate in quantity and quality.

Furthermore, an estimated 2 000 million people were said to live at risk of diseases resulting from deficiencies of Vitamin A, iodine and iron; most of them comprised of women and children living in the less developed countries of Sub- Sahara Africa, the eastern Mediterranean, South and Southeast Asia, Latin America and the Caribbean and the Western Pacific. It was, further documented that even in the economically developed countries iron deficiency was estimated to affect more than 20 per cent of women. As a result, deaths due to malnutrition deficiencies were substantial although difficult to quantify.

In Zambia, it had been documented: 'malnutrition rates are persistently high and on the increasethe proportion of stunted children rose from 50 per cent in 1996 to 53 per cent in 1998.... The infant mortality (109 per 1 000) and under five mortality rates are very high' (Human Development Report 2000: xiv-xv). In fact, malnutrition was one of the national issues of concern in the *Zambian Human Development Report of 2000*.

Malnutrition was acknowledged as a major global issue as evidenced from the 'Health for All' by year 2 000 in the 1978 at the Alma-Ata Declaration where the World Health Organisation identified Primary Health Care (PHC) as the major strategy for achieving progress. At this declaration, Primary Health Care was defined as:

...the essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self reliance and self-determination. (Ebrahim and Ranken, 1988:4)

The elements of Primary Health Care (PHC) were identified as being:

adequate water supply; adequate nutrition; safe sanitation; immunisation against major diseases; maternal and child care; community participation in deciding and supporting preventive health plans; back-up referral service for training of health care workers and for health problems requiring more qualified care; treatment for cuts and common ailments and parental education in nutrition and preventive health methods. (Ibid: 6)

It is from this declaration that countries all over the world, especially the developing countries like Zambia devised their health policies and programmes.

To this effect, Zambia in 1991 devised National Health Policies and Strategies as part of the health reforms to achieve 'Health for All' through Primary Health Care (PHC) strategy. Zambia also came up with a health vision which says:

The government is committed to the fundamental and humane principle in the development of the health system to provide Zambians with equity of access to cost effective quality health care as close to the family as possible. This means provision of better management for quality health care for the individual, the family and the community. In order to facilitate the attainment of this vision, the government has adopted the Primary Health Care strategy as the most appropriate vehicle. (Ministry of Health Planning Unit: 1991-37)

In adopting the Primary Health Care strategy, the government stressed that 'Health for All' was not only going to mean the improvement of accessibility of health services and reduction of mortality and morbidity but also the improvement of the quality of life of all Zambians. Therefore, the government in its PHC programme and health policies and strategies took great consideration of the main determinants of health identified as: environment, lifestyle (behavioural) socio-economic, cultural, political and health services. To achieve the vision through PHC the Ministry of Health set health goals. Among the goals set which were directly linked

to combating malnutrition was one which aimed at achieving equity in health opportunities through:

- a) Provision and intensification of integrated supermarket type of services to vulnerable groups; such - services include control of diarrhoeal disease, universal child immunisation, school health, safe motherhood and child health monitoring.
- b) Intensified nutrition promotion,
- c) Intensified family planning promotion,
- d) More effective education and social marketing for health,
- e) Assured equitable access of health services using modalities such as health insurance referral line by pass fees and special waivers. (MOH Planning Unit: 1991-37)

Furthermore, achievement of the said health goals required, more importantly, a structure to define the supervision and implementation. As such, the ministry created District Health Management Teams. Hence the creation of Lusaka Urban Health Management teams which managed all clinics in Lusaka, including the Chainama Hills Hospital.

Later, in 1992, the Ministry established Boards which were expected to manage and provide health services on an autonomous basis in all districts of Zambia. Hospitals were further urged to form Boards - hence the creation of Chainama Hills Hospital Management Board.

All in all, the above structure, according to the same document (National Health Policies and Strategy: 1991) was supposed to help Zambia achieve

goals of specific programmes created in the Ministry as well as implement health programme for the targets set. For example, the health programme target set in nutrition was 'to reduce percentage of under weight children (0-5 years) from 23 per cent to 18 per cent by year 2000' (Ibid: 1991: 82).

However, combating malnutrition especially in the vulnerable like young children is not an easy task because malnutrition is a multi-faceted problem which has many causes such as low income and poverty, poor political governance and abuse of human rights, illiteracy, poor economy, unemployment and unsustainable livelihoods and unplanned births. It is for this reason that combating and preventing malnutrition cannot be done in one way but in various ways.

However, in whatever form Seshadri (1987: 57) says:

most types of nutrition intervention such as feeding programmes, immunisations or growth surveillance, require an educational component to teach the beneficiaries how to effectively use the services of the programme. Nutrition, health education in nutrition programmes and the programmes themselves play a mutually reinforcing role, the latter acting as a major channel for transmitting nutrition messages.

However, desired social change, especially on nutrition, is one of the most challenging to achieve. This was due to the fact that prior to listening to innovative messages of nutrition, people already had values

and beliefs about nutrition in their own context that could have been taken from their culture and socialisation.

It is, for this reason, that Hubley (1993:37-38) wrote that 'it is important to find out how a particular belief has been acquired in order to predict how easily it might be changed.' He also indicated that 'it can be very difficult to change those beliefs which have been held since childhood or have been acquired from trusted persons in the community'. As such, care had to be taken to note the influencing factors acting as barriers to innovations both at individual and societal levels. These factors ranged from individual attitudes to societal norms. Consequently, to face this challenge, there was a greater need for strategic communication planning and implementation.

It is, in this vein, that greater interest by the student had yielded this study to specifically find out what communication procedures communicators in health institutions were applying in their efforts to induce social change in their clients as regards nutrition and health in children; as well as to see the impact of such messages and communication strategies on such people.

The Maternal and Child Health Clinic at Chainama Hills Hospital Health Management Board in Lusaka, like any other Maternal and Child Health

Clinic in the district, had been designed to cater for all children and mothers going to the clinic - both those who were undernourished and those who were not. However, the basic objective was to prevent malnutrition through constant growth monitoring of children and nutrition education to mothers attending the Child and Maternal Health clinic from different parts of Lusaka urban, and, in particular those in the catchment area although no strict rules on the catchment area were implemented.

Furthermore, the Maternal and Child clinic at this hospital had made tremendous efforts and interventions in preventing and combating malnutrition by using both nutrition education and growth monitoring.

However, in this study the focus was on the communication strategies used to induce positive change in addressing issues of child health and nutrition as a means for combating and preventing malnutrition in Zambia.

The Setting

This study was based at the Maternal and Child Health clinic which is situated at Chainama Hills Hospital in Lusaka Urban District in Lusaka Province of Zambia. Lusaka province has the highest growth rate in the country. Furthermore, the population for Lusaka province increased from

991 226 in 1990 to 1 391 329 million in 2000. More than three quarters (78 per cent) of the provincial population (1 084 703) is in Lusaka Urban District where the hospital is situated.

Zambia is a landlocked country which lies in the South-Central part of Africa, south of the equator. It extends from longitude of 22 degrees to 34 degrees east and from the latitude 8 degrees to 18 degrees south of the equator. It covers an area of 752 620 square kilometers and has an estimated population of 10,285,631 million as per 2000 Census of Population. Of this population 5,070,891 were males while 5,214,740 were females (Central Statistical Office, 2002:1).

Zambia's neighbours are Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia and Democratic Republic of Congo. The country has 9 provinces namely Northern, Luapula, Eastern, Central, Lusaka, Copperbelt, Southern, Western and North-Western Provinces. Each province has a provincial headquarters. A road network system links Zambia with her neighbours. In addition, Zambia has two railway lines which link some of the towns and some neighbouring countries. One railway line runs from Livingstone to the Copperbelt towns and another one from Kapiri Mposhi to Nakonde linking Zambia to Tanzania.

Although, the provincial headquarters, large towns and districts have good and fair road networks most rural areas are almost inaccessible by road. To access such areas people have to walk long distances to move from one area to another. As a result, there is a social-economic gap between rural and urban areas. A lot of people have moved to urban areas like Lusaka and the Copperbelt in search of better life prospects. In view of this phenomenon, Zambia is rated as one of the most urbanized countries in Africa. The country has been urbanizing at a very fast rate. In 1963, 20 per cent of the total population lived in urban areas. The percentage of the urban population was 30 per cent in 1969, 40 percent in 1980, about 39 per cent in 1990 and was estimated to be 38 per cent in 1995. Currently, about 35 per cent of the populations live in urban areas - a decline from 39 per cent in 1990.

Climate and Vegetation

Zambia has a tropical climate which is modified by altitude. It is marked by three seasons: the hot, dry season from September to October; the hot, wet season from November to April and; the cool, dry season, from May to August. The rainfall and altitude generally decrease from north to south. As a result, the savanna woodland type of vegetation is concentrated mostly on the plateau in Northern, North-Western, Copperbelt and northern part of Central Provinces which experience heavy rainfall. In the southern and eastern parts of the country we also

have in the South, Mopane trees and short grass and light savanna woodland. The country has, in addition, large game reserves such as the Kafue and Luangwa which are well-stocked with a wide-variety of game.

The People

Zambia is a multi-ethnic nation of which 98.7 per cent are Africans, 1.1 per cent Europeans and 0.2 per cent other assorted groupings. The religions practiced in the country include Christians ranging from 50 – 75 per cent of the population; Muslims and Hindu 24 – 49 per cent and 1 per cent indigenous beliefs.

The country's official language is English although Zambia has 73 ethnic groups. There are seven major local language groupings, namely: Bemba, Tonga, Lunda, Kaonde, Lozi, Luvale and Nyanja. While it had been argued that 'educated females have lower fertility, better child care and contribute significantly to better nutrition and health of the family', the Central Statistics Office 1990 Census revealed that by that year 43.7 per cent of the females in Zambia never had any education at all, 41.5 per cent had only attained primary school while 11 per cent had done secondary school, and only 0.1 per cent had done tertiary education. As such, this had major implications on the child health nutrition because a large number of females were illiterate.

Place of Study

The study was carried out in Lusaka Urban district of Lusaka province at the Maternal and Child Health Clinic at Chainama Hills Hospital. Lusaka province is located in the central part of the country. The province has an estimated population of 1 599 973 (Central Statistical Office, 1998) and most of the people live in Lusaka, the country's capital city, particularly in the urbanised part of Lusaka.

There are four districts in the province. These are Kafue, Chongwe, Luangwa and Lusaka urban. Lusaka province has one of the most effective communication networks in the country, especially in Lusaka urban and peri-urban areas.

History

Historically, Zambia was a colony of Britain and was awarded independence on the 24th October, 1964.

The Economy

Since the mid 1970s, Zambia's economy has not been performing well.

The CIA World Fact Book 2002:7 wrote:

Despite progress in privatisation and budgetary reform, Zambia's economy has a long way to go. Privatisation of government owned copper mines relieved the government from covering mammoth losses generated by the industry and greatly improved the chances for copper mining to return to profitability and economic growth. However, low

mineral prices have showed the benefits from privatising the mines and reduced incentives for further private investment in the sector. In late 2000, Zambia was determined to be eligible for debt relief under the Heavily Indebted Poor Countries (HIPC) initiative, but Zambia has not yet finalized its poverty reduction strategy paper. Unemployment rates remain high but the GDP growth should continue at about 4 per cent. Inflation should continue to remain close to 20 per cent. Moreover, in the same document, it is recorded that 86 per cent of the total population are below the poverty line.

Some of the contributing events to this scenario included: the direct support of liberation struggles of its neighbours, Angola, Mozambique, Zimbabwe (then Rhodesia) and South Africa which meant that a big part of its finances meant for the improvement of social services went for this cause. The falling copper prices at this period brought about lower income for the country and it became increasingly difficult to adequately develop social services like health and nutrition; the Unilateral Declaration of Independence (UDI) by the Rhodesian regime (Zimbabwe now) and a youthful population that multiplied faster than the growth and development of the economy created problems like unemployment which affected the general health in families, especially the nutrition of vulnerable members of the family such as children; poor food security due to neglect of development of the agriculture sector because of over dependence on copper mining ; and over borrowing by the government creating a debt burden of 7 billion US\$ dollars by 2003.

During the 1990s, the closure, sale and liquidation of major parastatal companies like United Bus Company, Zambia Airways Corporation Limited and the copper mines coupled with unpaid pensions and packages brought in a new level of poverty, destitution and disillusionment that could be greatly associated with rising levels of malnutrition among the general populace in particular children under five years who are most vulnerable. In addition, HIV/AIDS has also contributed to the rising levels of malnutrition due to deaths of breadwinners, the result being the upswing of more households that are child headed or headed by elderly guardians.

1.2 Statement of the Problem

Malnutrition's causes are multi-faceted and require multi-faceted strategies to inculcate a positive social change and behaviour in the community. A number of communication strategies to educate people on ways to prevent and combat malnutrition had been tried and applied in communities. However, malnutrition seemed to be on the increase despite the many interventions. Seshadri (1987) was quick to indicate that it was becoming increasingly clear that gain in knowledge may not necessarily lead to change in practice. As such, in transmitting messages successfully, both message content and communicability of the message were important considerations. The complex problem has hit

Zambia and continues to be a source of concern to all, and nutrition health education in particular.

This study reports on the strategies used by Chainama Hills Hospital to combat and prevent malnutrition. The report provides a preliminary overview on the successes and failures of the nutrition education and other interventions applied. In addition, it provides perceptions of respondents on the causes and prevention of malnutrition from the mother's point of view.

1.3 Rationale

Malnutrition is a major problem among most people in Zambia. In support of the need to fight the problem, a document by the National Food and Nutrition Commission (NFNC) (1993: vii) stated that:

“Malnutrition in Zambia is a serious problem, children especially, are at risk of malnutrition. The most common signs of malnutrition are underweight and stunting, anemia, night blindness and goiter. Malnutrition and diseases such as ‘diarrhoeal diseases, measles, respiratory diseases and malaria cause many deaths in children under 5 years of age, and poor growth and disability and many more.”

A lot can be done to combat malnutrition and its causes. The NFNC (1993) also indicated that many programmes had already been set up to tackle the problem in different ways. However, the researcher noted that to be successful any programme must try not only to locate the problem

of malnutrition itself but by also finding ways of tackling the cause, within the family, the community and the country.

This study is important in that it discussed the communication strategies used to combat and prevent malnutrition as well as the successes and failures of such strategies in the interventions. Furthermore, the study was done so that the strategies and presentations could be re-evaluated to induce positive change and attitude. This is due to the fact that most efforts undertaken by various organizations seeking to induce social change are done without paying attention to the key steps involved in communication for social change and this has resulted in the failure of many national programmes.

In addition, the experiences of mothers or parents of children brought to the Maternal and Child Health clinic have a greater effect on adoption of nutrition education provided there. Therefore, the student perceived the Maternal and Child Health at Chainama Hills Hospital to be one of the appropriate organisations for attachment to learn how communicators in nutrition and health promotion organizations implement communication for social change.

CHAPTER 2

2.0 METHODOLOGY

2.1 Attachment design

The design of the proposed practical attachment was to enable the student have access to the nutritional and child health activities as well as the parents and nutrition communicators at Chainama Hills Hospital in Lusaka. Careful recording was done at the Clinic in co-operation with the health communicators and mothers of the children went to the clinic. The student conducted an inquiry into the communication products that the clinic had produced and used in nutrition and health education interventions. This was to enable the student learn the steps which were followed in the development and utility of the products and find out how much the parents attending the nutrition education and other sessions appreciated such programmes.

To do this, the student conducted an inventory of the most recently produced materials and how they had been utilised. A questionnaire and an in depth interview was administered to gather details in terms of:

- (i) the materials that had been produced in the promotion of nutrition and child health,
- (ii) How the idea to produce the materials was conceived,
- (iii) Who the target groups were,

- (iv) Who participated in message development,
- (v) What criteria was used to select participants in the message development,
- (vi) How much impact had the different strategies yielded after application of such strategies on the target group?, and
- (vii) How the beneficiaries of the materials viewed such materials.

2.2 Research Questions

During the attachment the student attempted to answer the following questions.

1. To what extent do communicators in nutrition and child health promotion at Maternal and Child Health Clinic at Chainama Hospital follow principles of communication for social change and procedures to change behavior?
2. How much impact are the communication strategies perceived to have had on the target audience?
3. Which strategies are thought to have yielded more behavioural change, and for which audience?
4. What are the perceived hurdles to the efforts and strategies used to fight malnutrition and how they should be tackled?

After gathering details regarding the produced materials and how they had been used, the student was expected to hold an in house

dissemination seminar with nutrition educators to share what the student had learnt in the Master of Communication for Development (MCD) programme.

For the rest of the attachment, the student interacted with the communicators and parents in the communication activities and interventions that the organization would be undertaking. Occasionally, time allowing, the student was expected to organize the seminars for the communicators at the said Maternal and Child Health Clinic. However, due to pressure of work by the personnel this was not possible. The purpose of these seminars was to share and discuss communication innovations that were taught in the communication for development programme offered at the University of Zambia (UNZA). The researcher still hoped an opportunity could be raised at some point in future to have the seminar conducted.

2.3 Sampling Procedure for the Study

Purposive Sampling

The study utilized a non-probability sampling procedure, specifically, purposive sampling. The reasons for selecting this procedure was that the target population were not readily available as they abruptly arose to respond to the Ministry's policy to monitor all children's health from birth to five years and to treat all children affected by nutritional and

health problems. As such their numbers kept on rising and falling from time to time. In this case, it was difficult to design a specific random sampling of population when the actual population was unknown and 'fluid'. As a result, the purposive sampling procedure had been perceived to be the most appropriate for this study because this type of the sampling procedure was non-random and allowed the researcher to use a desired appropriate criteria to choose the elements to allow the researcher to capture a wide range of facets from the target audience since the elements were chosen in a deliberate, consciously controlled manner with prior design and purpose.

In this case, the type of purposive sampling used was the maximum variation sampling. This type of sampling allowed the researcher freedom to identify the categories of interest in relation to the research topic and then intentionally sought out subjects or settings which represented the greatest possible range of differences in the phenomenon being studied. As such, this meant that in this study the sample was, all the nutrition educators working with the Maternal and Child Health clinic at Chainama Hills Hospital in designing communication material, and mothers with children from age of 0-5 years who were picked on by the researcher for the interview.

Lastly, the procedure was chosen because the total population of the mothers attending the clinic was not known, not even to the hospital, because people chose when to go to the clinic and which clinic to go to. As such, all elements available during the session and time that the researcher was collecting data and those involved in the communication process were interviewed.

2.4 Data Gathering Procedures

This was done through personal interviews, questionnaires and participant observation. Questionnaires and interviews were the two most widely used primary data collection methods for the study of 100 parents/guardians while participant observation was widely used the research being a participatory research.

The interview involved the collection of data through direct verbal interaction (often face to face) and, in this research, the interview was used to gather data from the communicators which comprised nurses working at the Maternal and Child Health Clinic.

The interview method was particularly chosen because the interview situation allowed the researcher to follow up verbal leads and as such more data was obtained with greater clarity. Furthermore, the interview

situation permitted much greater depth than other methods of collecting data.

In-depth Interview

In-depth interviews were used to collect data from communicators. In depth interviews were a unique instrument used in the collection of data through direct verbal interaction (often face to face). The in-depth interviews were used in this research because of the advantage they had of allowing a researcher to follow up verbal leads and thus obtained more data and greater clarity on a number of issues. Lastly, the interview situation permitted much greater depth than other methods of collecting data.

Questionnaires

Questionnaires, on the other hand, were used to collect data from mothers/guardians of children brought to the clinic. The questionnaires were chosen as an instrument for collecting data because these were ideal instruments for use in surveys with descriptive or exploratory purposes as well as in studies with experiment and case study research strategies like this research. However, in practice some of the questionnaires were used for interviews for mothers who could not read and write.

Furthermore, they were particularly chosen in this research because they accommodate behavioural questions which can measure attitudes, beliefs, opinions and motives. In addition, questionnaires allow for greater use of different questioning techniques such as open ended questions which bring out a lot of information from the respondents.

Participant observation

Although, there are two types of broad categories of observation, namely participant observation and structured observation, in this research only the participant observation was used. In participant observation, the researcher gathered data as a participant observer, whose identity and objectives in the observation was known to the respondents, particularly the nutrition communicators.

However, only one category of data (observational variables) generated by participant observation, the secondary observations, which related to statements by observers of what was said or done and encompassed the perceptions and feelings in the course of observing phenomena was used. (Saunders et al 2000:223).

However, in this research, all the three observational variables were used. This was due to the fact that, to answer the research questions on behavioural change among mothers with children attending the Maternal

and Child Health Clinic one had to record what was done and said by the mothers. These recordings were to indicate how much they valued the nutrition education provided and their perceptions and feelings on the nutrition education sessions given.

CHAPTER 3

3.0 CONCEPTUAL FRAMEWORK

3.1 Introduction

In this study of several concepts and theories were examined as these determined how the subject matter was to be perceived and what aspects were to be emphasized. The theories related to information flow and perception of information by recipients and behavioural change were the ones in focus, these included the social change campaign, the diffusion theory and the KAP formula. In this report, the concepts provided the essential cornerstone for the study.

Malnutrition

This referred to underfeeding which eventually leads to nutritional problems and deficiencies such as kwashiorkor, marasmus, anemia and goiter. This variable was mainly measured by anthropometrical measures which involved weighing the children to check for the right weight for the age; right height for the age and analyzing the skin texture and the general appearance of the children and their departure from normal helped to determine the type of malnutrition and the severity of the malnutrition. This was done by the health personnel at the clinic.

Communication

Communication is the interactive process characterized by the exchange of ideas, information, points of view and experiences between persons and groups. This involve use of mass communications where the print media in form of posters, newspapers, brochures, television and radio, including popular theatre will have been used to disseminate information on good nutrition and malnutrition.

Strategies

This is a set of procedures involving planned line of action.

Social change campaign

This is an organized effort conducted by one group (change agent) that intends to persuade others (target adopters) to accept, modify attitudes, practices and behaviour.

KAP

This stands for Knowledge, Attitude and Practices.

There are two types of knowledge:

- (i) *Indigenous knowledge*: these are localized techniques and practices which have been developed and handed down from parents to children built upon centuries of experience and adaptation and in harmony with the environmental

conditions and constraints in the community that are usually presented in local languages.

- (ii) *Adopted knowledge:* are those techniques, processes and practices that were originally introduced into the community from outside.

Attitude

Attitudes are those acquired mental positions, negative or positive that a group holds in regard to some idea or object. Often attitudes dictate how people behave.

Practices

They are those acts or actions that are done in relation to particular issues. Practices are either indigenous or adopted.

In addition a number of theories will be used to explain certain concepts and guide the direction of the study. Tones and Tilford (1994:83) say:

‘adopters of an innovation are presumed to move through a series of stages similar to those embodied in the ‘K-A-P’ formula in other words, awareness of the innovation followed by arousal of interest prior to trying out the new practice, and ‘ultimately’ adopting it. Individuals differ as regards the length of time.”

This is particularly true of the positive nutritional innovations that have been introduced in the Zambian community since the pre-colonial days by missionaries and wives of missionaries until to date.

In this study, social campaign theory, diffusion theory and the K-A-P formula in the education process will be referred to in order to try and explain why particular communication strategies need to be used in particular situations to induce positive change; and also to explain why certain communication strategies used in nutrition programmes might fail to yield the expected results in the community and some might succeed.

Among the theories referred to in this study were Diffusion theory, Social Change Campaign theory and the K-A-P formula. Diffusion theory explains how ideas are spread among groups, and it also looks at the conditions that increase or decrease the likelihood that members of a given culture will adopt a new idea, product or practice. It also explains the process of diffusing new ideas in the community. Diffusion theory and the Communication of Innovations theory propounded by Rodgers (1993) as quoted by Tones and Tilford (1997) focuses on five elements.

These are:

1. The characteristics of an innovation which may influence its adoption;
2. The decision making process that occurs when individuals consider adopting a new idea, product or practice;
3. Characteristics of the individuals that make them likely to adopt an innovation;
4. The consequences for the individuals and society of adopting an innovation;
5. Communication channels used in the adoption process

In apparent reference to the multi-stage flow of information theory, Infante et al (1997: 362-363) say:

Communication channels include both the mass media and interpersonal contacts' and points out that they are intermediaries between the media and the audience's decision making' such as opinion leaders who still exert influence on the audience behaviour via their personal contact. However, they argue that intermediaries called change agents and gatekeepers are also included in the process of diffusion. Change agents are said to be 'those professionals who encourage opinion leaders to adopt or reject an innovation' while 'Gatekeepers are said to be individuals who control the flow of information to a given group of people' and 'opinion leaders are usually quite similar to their followers.

This theory explains that information is not perceived and received in a uniform manner by all the recipients of the messages. One factor responsible for this is the presence of opinion leaders who may or may not be known by the communicators at the clinic or hospital like the Maternal and Child Health Clinic. In this context, the research acknowledged that opinion leaders existed in the communities the children and their parents and guardians lived. These could be a barrier to effective communication between the health communicator and the parents of children who took children to the maternal and child clinics. Consequently, it led to incidences of malnutrition among children if the opinion leaders negatively influenced the parents against adopting nutrition messages from the clinic despite the many educational sessions given to mothers prior to the children being affected by malnutrition. Therefore, information given by the health and nutrition communicators was to be highly valued by the recipients only if the parents (recipients) viewed the communicator as a well informed and intelligent, and trustworthy person, and an expert in the field of nutrition more than the opinion leaders in their communities.

Social campaigns theory, on the other hand, assisted in planning, designing and dissemination of messages. It gives tips on the organization of the campaigns, looking at factors that will prevent messages in the social campaign to fail to induce the desired response in

people. Social Change Campaigns are said to be 'an organized effort conducted by one group (the change agent) which intends to persuade others (the target adopters) to accept, modify attitudes, practices and behaviour (Kotler 1989:6).

However campaigns, though a better alternative of behavioural change compared to education process can sometimes fail even when a lot of effort and good organization has been done. This is supported by Hyman and Sheatsley (1964:52) who concluded that information often fail because:

- (1) A hard core of 'chronic know nothing' exists who cannot be reached by information campaigns. In fact there is something about the uniformed that makes them harder to reach, no matter what the level of nature of the information.
- (2) The likelihood of an individual responding to new information increases with the audience's interest or involvement in the issue, if few people are interested.
- (3) The likelihood of an individual being receptive to new information increases with the information's compatibility with the audience is prior attitudes. People tend to avoid disagreeable information.
- (4) People will read different things into the information they receive, depending on their beliefs and values.

Other social researchers have concluded that some factors can dilute mass media impact on campaigns. Among the factors they listed were:

- (1) Audience factors, such as apathy, defensiveness, and cognitive ineptness.
- (2) Message factors such as messages that do not convey real motivating benefits to citizens in an attention getting way.
- (3) Media

factors such as the failure to use appropriate media vehicles at the proper time or ineffective ways or to reach target adopters with the type of media they are most receptive to. (4) Responsive factors, such as failure to provide receptive, motivated citizens with an easy and convenient way to respond positively to a campaign's objectives and to carry out the campaign's intentions. However, some social scientists have argued that when certain suitable conditions are created, social change campaigns can be successful.

Lazarsfield and Merton (1975:24) identified the following conditions for successful mass media-oriented information campaigns. They argued and listed them as follows:

(1) **Monopolization:** an information campaign has to enjoy a monopoly in the media, so that there should be no messages that are contrary to a campaign's objectives. However, most campaigns in a free society face competition (several alternative campaigns that pursue a similar goal or other social causes that compete for attention) and are unable to monopolise the media.

(2) **Canalization.** Mass and information-oriented social campaigns depend on a favourable public attitude base. Commercial advertising is ineffective because its task is not to instill basic new attitudes and behaviour patterns but to channel existing attitudes and behaviour in one direction or another. For example, a toothpaste manufacturer does not have to convince people to brush their teeth but only to direct them to use a particular brand of toothpaste. Pre-existing attitudes are easier to reinforce than to change.

(3) **Supplementation.** Social change campaigns work best when mass media-oriented communication is supplemented by face-to-face communication; to the extent that people are able to discuss in what way they will process the information better and are more likely to accept changes.

Actually, change of attitude and adoption of a new innovation such as good nutrition, starts with assessing the indigenous knowledge that the people already have and the information that the organization intends to present to the people. (Tones and Tilford, 1997) The message should be designed in such a way as to try and yield positive attitudes that will eventually change the people’s practices to prevent or control a problem such as malnutrition. The process is similar to the KAP education process presented below.

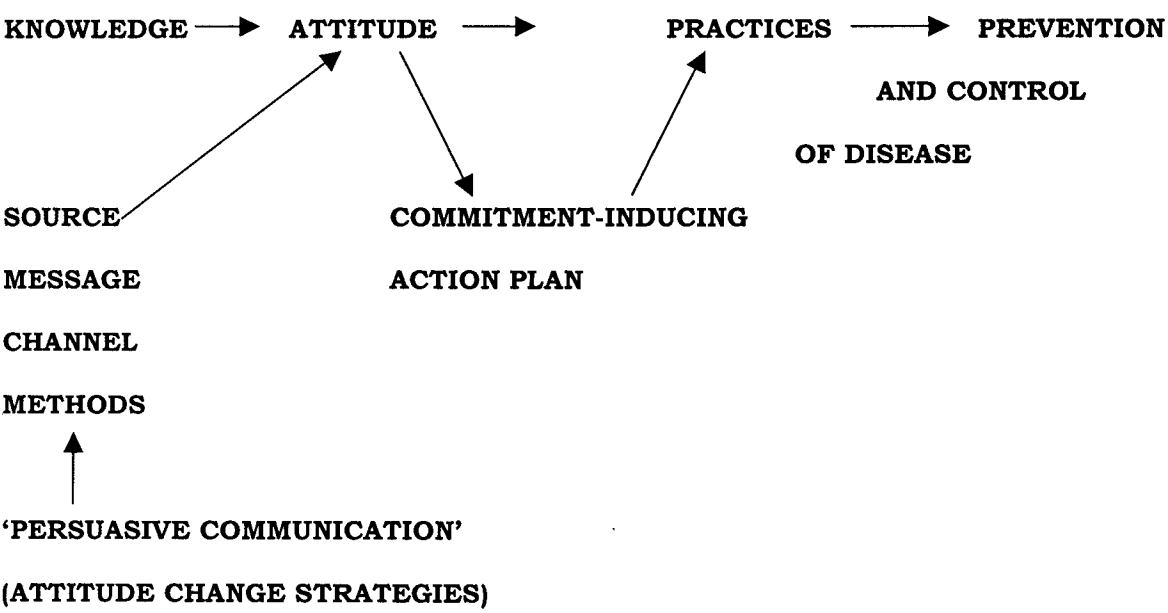


Figure 1: Prevention: the KAP educational process.

Source: Tones, K and Tilford, S., (1994) Health education: Effectiveness, efficiency and Equity, Chapman & Hall: London.

CHAPTER 4

LITERATURE REVIEW

The Ministry of Health is a government organisation that coordinates a good number of behavioural social change programmes. One such social change programme is the maternal and child clinic found at all the clinics where the health and nutrition of mother, expectant mothers and children below the age of five years are monitored. In monitoring the health of children, nutrition and health education is given to mothers/fathers/guardians of the children, and each parent/guardian is advised personally on how to look after the child especially in terms of nutrition. The providers/agents/communicators of such education are nutritionists, health workers, and nurses. They strive to persuade parents who take children to the maternal and child health clinics, who are the target adopters to accept, modify or abandon certain ideas, attitudes and practices which can endanger the child's health. Among the factors emphasised at such sessions are:

- (i) Exclusive breastfeeding
- (ii) Importance of child spacing to the health of the child still being breastfed
- (iii) Consequences of early and abrupt weaning and
- (iv) Child Health and Nutrition (King and Burgess (1972))

However, the Ministry of health does not just end at the communication stage for these change programmes but also provides curative measures should any of the recipients of such health and nutrition education sessions be affected by any nutritional problems like malnutrition, hence the creation Maternal and Child Health Clinics.

In support of this view, the Ministry of Health has set up stringent measures and tasks to solve health problems among which prevention of malnutrition tops the list. ZDHS (2002:4) reports:

The health reforms established by the government's commitment to improve the health of the population achieving by progress towards the achievement of the following targets by the year 2000:

- To reduce the percentage of underweight children (0-5 years),
- To bring under control 80 per cent of tuberculosis cases,
- To increase accessibility to and accessibility of family planning services and appropriate use of information in order to increase family planning use,
- To improve quality of access to and utilisation of maternal and child health services in order to reduce maternal deaths and complications,
- To reduce the incidence of sexually transmitted infections (STIs), AIDS, and reproductive tract infections

- To reduce the incidence of induced abortions in order to reduce maternal complications and deaths and
- To increase the percentage of the population having adequate sanitation from 66 to 75 per cent in urban areas and from 37 to 57 per cent in rural areas by 1996 (MOH, 1992).

The reforms are a clear indication of government's commitment to the prevention and combating of malnutrition among children in Zambia.

The focus in this study was, therefore, on the activities done at the Maternal and Child Health Clinics at Chainama Hospital. The study focused on the communication strategies undertaken by the said clinic to combat and prevent malnutrition.

Achieving social change calls for very reflective communication. The required communication goes beyond an ad hoc 'let's -print-a - poster' approach. It requires an understanding of the beliefs, values, knowledge, attitude and practices of the target audience, including the processes people go through to adopt an idea; factors that affect people's adoption of innovations negatively or positively.

Available literature culminating from various studies shows that social change can only be achieved through communication programmes.

Furthermore the strategies used and the design of messages and their appropriateness plays an important role in the positive adoption of the innovation, like good nutrition, to prevent and combat malnutrition in Zambia.

As indicated earlier, malnutrition is not only a Zambian problem but is a global one though affecting more of the developing nations like Zambia than the developed nations. In support of this, Alnwick (1997:3) states that nearly half of the world's people are malnourished. Historically, malnutrition has been with humanity due to a number of causes such as natural disasters like drought, famine and man-made causes like wars and an unequal distribution of resources.

The prevalence of malnutrition in Zambia is equally historical dating back to the pre-colonial days when missionaries and wives of missionaries struggled to offer domestic science lessons formally and informally to improve the health and nutritional status of the new converts to Christianity. However, before independence, there was very little data recorded and no organized nutritional surveillances until in the late 1960s when organized research and studies began.

One of the first national comprehensive nutritional survey of 1972 revealed that about 23 per cent of children aged between 0 and 4 years

in Zambia were moderately or severely malnourished. The survey also found high prevalence of infectious diseases and nutrient deficiencies (UNDP, FAO and NFNC).

Another national survey done in 1984 revealed that 28 per cent of the children aged 0 – 60 months were undernourished.

Another survey conducted by PIC/NFNC in 1991 showed that 29 per cent of the children aged 0 – 6 months were undernourished (PIC/NFNC: 1991)

Furthermore another study on Lusaka Urban district conducted by NFNC/UNICEF on the children aged 0 – 6 months revealed a malnutrition rate of 30 per cent. This therefore indicates an ever-increasing prevalence of malnutrition. The reasons for the rising rates in malnutrition could be linked to Zambia's declining economic performance over the years – particularly since the end of 1970s.

Siandwiza (1992) argues that:

Under-nutrition develops soon after 6 months indicating the problem with the introduction of supplementary foods and too much reliance on breast milk beyond the age of 6 months. Weaning practices tend to deprive infants of additional sources of nutrients to supplement breast-milk, which at this age becomes inadequate. However, the source of nutrition is not always the cause of malnutrition. In some cases children just do not get enough food or nutrients (Siandwiza 1992:4)

In addition, the joint Situation analysis by GRZ and UNICEF (1986) indicated a high mortality of children due to malnutrition.

This scenario has never been reversed because cases of malnutrition are on the increase. Recently the ZDHS (2002:180) revealed that 47 percent of children fewer than five years are stunted and 22 percent are severely stunted. Five percent of children under five were found to be wasted. Only 1 percent were severely wasted. In addition, results on weight-for-age revealed 28 percent of children less than five years to be underweight and 7 percent severely under weight.

Furthermore, past reports have indicated that prevalence of malnutrition clearly indicated regional variations. The data reveals that those provinces further away from the capital city and the line of rail and major transport links are the most affected by the problem. 31 per cent of all children with malnutrition were off the line of rail. This is possibly an indication that the urban centers and the capital city receives more nutritional education than the rural provinces, or possibly the communication strategies used in nutritional programmes are not appropriate or relevant to the target groups' perceptions of the innovations. (UNDP/FAO, 1974; National Nutrition Surveillance Data, 1988; Cogil, B. and Zaza, M. 1990's Nutrition Module Report.

These variations are still indicated to date, for example the ZDHS (2002:179) has indicated that even food security varies by province with Northern 59 percent, Central 55 percent, North-Western provinces 55 percent having the highest proportions of households that are food secure and Southern 16 percent and Eastern 19 percent having the lowest. However, the same report has shown that the provinces with the highest food security have got the highest number of underweight children. The report states that , Eastern, Luapula, and Northern provinces have stunting and underweight levels that are above national average while Lusaka has the lowest level of stunting and underweight 36 and 22 percent respectively and wasting is particularly high in Northern and Copperbelt Provinces (Ibid 2002:182). This in a way is an indication that having food secure households is no guarantee for good nutrition practices and the absence of malnutrition and that Malnutrition will not only strike in homes that are not food secure but even those that are food secure.

In conclusion, therefore, one can only state that appropriate persuasive attitude change strategies seem to be the key to effective nutritional and health education. Furthermore, the strategies used in nutrition and health education must be accepted by the recipients for them to be implemented adequately. To try and link up food security with availability of good nutrition organisations like National Food and

Nutrition Commission have tried to identify ways of combating malnutrition and promoting good nutrition.

NFNC (1993: ix) identifies ways of treating underlying causes of malnutrition at both family and community levels and suggests the following actions to promote long-term prevention of malnutrition. Among those activities similar to those offered at the Maternal and Child Health Clinics strategies included:

- Activities to improve household food security for the families with children with malnutrition
- Nutritional and health education for parents of children with malnutrition
- Provision of better maternal and child care through follow ups on outpatients
- Programmes for improved feeding practices

The Food and Nutrition Commission have also employed the following strategies for communicating messages to prevent malnutrition (NFNC 1993: 2 – 7) which includes home visits, talks, discussion groups, food demonstrations, telling a story, songs, drama and role play as well as using visual aids like real objects, photographs, flannel boards, flip charts, picture cards and posters. All these efforts seem to have yielded some positive response but they have not helped to reduce malnutrition

levels downwards consequently, the malnutrition levels in the country keep on rising.

The previous ZDHS surveys collected shows that 'the proportion of children under five who are stunted has increased from 40 per cent in 1992 to 42 per cent in 1996 and to 47 per cent in 2001-2002 and the proportion of underweight children has also risen, though less sharply, from 25 per cent in 1992 to 24 per cent in 1996 and 28 per cent in 2001-2002'.(ZDHS 2001-2002:183) The same report has also indicated that the educational levels of a mother have an effect on the nutrition of the children and has theorised that the lower the education of the mother the greater the probability of the child having malnutrition.

These assumptions have raised some thoughts on communication strategies to use that can capture all mothers educated or not educated to receive information on good nutrition in a clear, uniform and effective way.

CHAPTER 5

FINDINGS

5.0 Introduction

Data collected during the attachment was analysed by using appropriate charts and statistics arrived at with the use of the Statistical Package for Social Science (SPSS). Two instruments namely the questionnaire for mothers and the interviews were administered and supplemented by observations made by the researcher during the observation.

The chapter outlines the findings on the communication strategies used in combating and prevention of malnutrition as well as the materials used in teaching nutrition at the Maternal and Child Health clinic at Chainama Hills Hospital.

5.1 Nutrition and Health Communicators

Research findings revealed that the nutrition and health communicators interviewed who were working at the time of the interview were mostly female nurses who comprised Zambia Enrolled Nurses (ZEN). Enrolled nurses have been trained in basic nursing and are the junior-most in the establishment. Zambia Enrolled and Midwife Nurses (ZEN/ZEM), on the other hand, have, apart from having been trained as enrolled nurses also done specialized training in midwifery at enrolled nursing level. The

Zambia Registered Nurses (ZRN) qualification is the highest basic level of nursing and the training is more advanced than that of the enrolled nurses. The Zambia Registered and Midwife Nurses (ZRN/ZRM) have added on some specialized training in midwifery in addition to the initial registered nursing training. 100 per cent of the nutrition educators at the clinic were nurses and they were all female.

5.2 Qualifications of the Communicators

However, 50 cent of the group held the qualifications of Zambia Enrolled and Midwife nurses, while the rest, the Zambia Registered Nurses and Zambia Registered and Midwife Nurses, were evenly divided at 25 per cent respectively.

Job Title	Frequency	Percent	Valid Percent	Cumulative Percent
ZRN/ZRM	2	50.0	50.0	50.0
ZEN	1	25.0	25.0	75.0
ZRN/ZRM	1	25.0	25.0	100.0
Total	4	100.0	100.0	

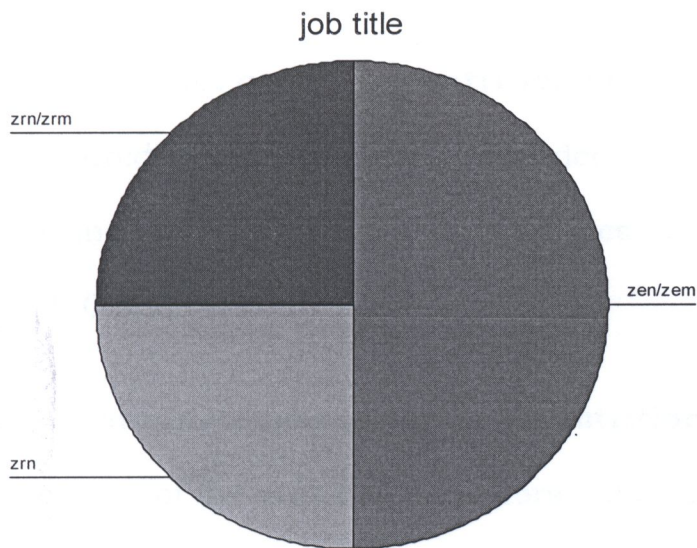


Figure 2: Chart showing the job title and number of personnel interviewed

5.3 Materials produced to promote Nutrition and Child Health

100 per cent of all the Nutrition and Health communicators indicated that the type of materials used to educate mothers on nutrition education were print materials. Among the most popular ones mentioned were brochures, leaflets, charts, posters and booklets.

5.4 Roles played in communication strategies

100 per cent of the nutrition educators interviewed indicated that they played the role of nutrition educator more in nutrition education sessions than the other roles.

5.5 Venue for conveying nutrition messages to target group

A hundred per cent of the respondents indicated that the venue for conveying nutrition education messages was the Maternal and Child Health Clinic room.

5.6 Appropriateness of venue for nutrition education

75 per cent of the nutrition educators indicated that the venue was not appropriate for nutrition education. However 25 per cent did not answer and so their responses were indicated as not sure.

If venue is appropriate or not		
	Frequency	Percent
No	3	75.0
Not sure	1	25.0
Total	4	100.0

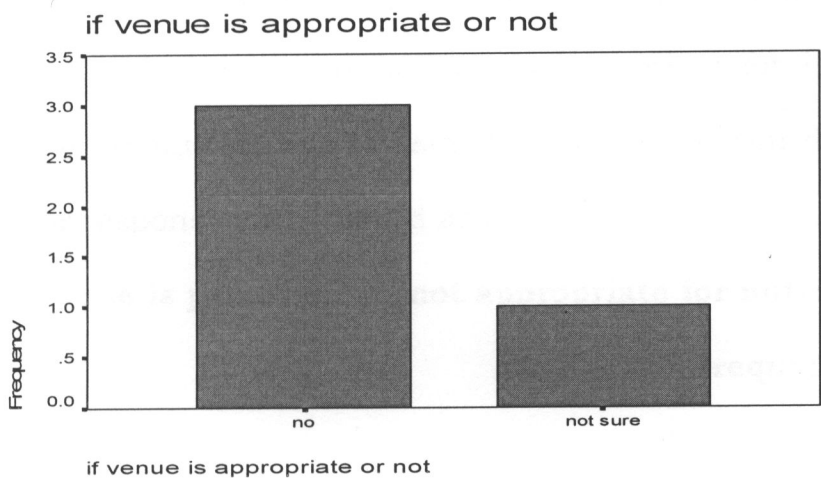


Figure 3. Chart showing responses of communicators on appropriateness of venue

5.9 Developer or Producer of the Materials

Research findings further revealed that 75 per cent of the communicators of nutrition education at the clinic did not know the person or people that developed the nutrition education materials and how the said nutrition education materials were produced because they were not involved in their production. However, 25 per cent of the personnel indicated that it was the Ministry of Health education unit which development the materials.

5.10 Target group of the materials produced

75 per cent of the nutrition educators indicated that the target group for the nutrition education materials used in nutrition education sessions at the clinic targeted any one who went to the Maternal and Child Health Clinic. On the other hand, 25 per cent said that they targeted women who went to the same clinic.

5.11 People's attitudes in relation to the materials used in

nutrition education

25 per cent indicated that they thought that investigations were made on people's attitudes in relation to materials prior to using the materials while 75 per cent said they did not think so.

5.12 Conception of the idea to produce materials

The research revealed that 75 per cent of the nutrition educators did not know whether the target audience was identified prior to the development of the materials or not because the Health Education Unit (HEU) of the Ministry of Health which is charged with the responsibility to do this was reported to have done the work and none of the nutrition educators remembered being consulted.

5.13 Pre-testing of materials

When asked about pre-testing of the materials prior to their development, 100 per cent of the communicators indicated that they had not pre-tested the materials since they were not the ones who developed the materials. Furthermore, none of them could remember taking part in a pre-testing exercise.

5.14 Component effectiveness of pre-tested materials

50 per cent of the communicators indicated that there was no checking of the component effectiveness because pre-testing was done and had no reasons for doing so. 25 per cent said there was no checking of the component effectiveness because the people that dealt with materials were those based at the district office. 25 per cent did not answer the question and so the response was indicated as not applicable.

Reasons for not looking at component effectiveness

	Frequency	Percent
Have no reasons for doing so	2	50.0
People that deal with materials at district did not do so	1	25.0
Not sure	1	25.0
Total	4	100.0

Figure 6. Table showing responses of reasons for not looking at component effectiveness.

5.15 Dissemination plan of materials produced to the target audience

100 per cent of the nutrition educators indicated that they did not know if there were any dissemination plans anywhere for the communication materials produced. Furthermore, they indicated that they were not aware of any dissemination plans put in place at the clinic. They further indicated that materials were disseminated indiscriminately by giving them out to whoever attended the Maternal and Child Health Clinic after each nutrition education session or even without an education session as long as the clientele indicated that they could read and understand the language in which the material was written.

5.16.0 Characteristics of parents attending nutrition education sessions at the Maternal and Child Health Clinic at Chainama Hills Hospital Clinic

5.16.1 Marital status

89 per cent of the respondents were married, 3 per cent separated, 3 per cent divorced, 3 per cent engaged and 2 per cent were single.

Marital status	Frequency	Percent
Single	2	2.0
Married	89	89.0
Separated	3	3.0
Divorced	3	3.0
Engaged	3	3.0
Total	100	100.0

Figure 7. Marital status of parents who attended Maternal and Child Health Clinic

5.16.2 Highest educational level attained

34 per cent were Grade 12 while 26 per cent above grade 12. The rest were 21 per cent Grade 9 and 19 per cent were below Grade 7

Highest educational level attained

	Frequency	Percent
Below grade 7	19	19.0
Grade 9	21	21.0
Grade 12	34	34.0
Above grade 12	26	26.0
Total	100	100.0

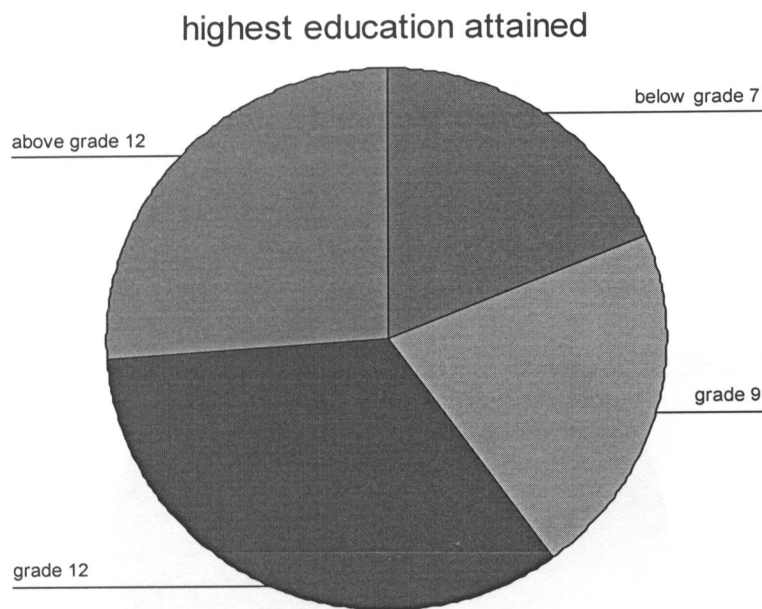


Figure 8. Chart showing highest educational level attained

The audiences were, therefore, generally well educated and able to use both print and broadcast electronic media materials adequately.

5.16.3 **Employment status of parents who attended the
Maternal and Child Health Clinic at Chainama Clinic**

59 per cent of the parents/guardians who attended the clinic were unemployed. 26 per cent were formally employed while 15 per cent were informally employed.

Whether employed or not

	Frequency	Percent
Formally employed	26	26.0
Informally employed	15	15.0
Unemployed	59	59.0
Total	100	100.0

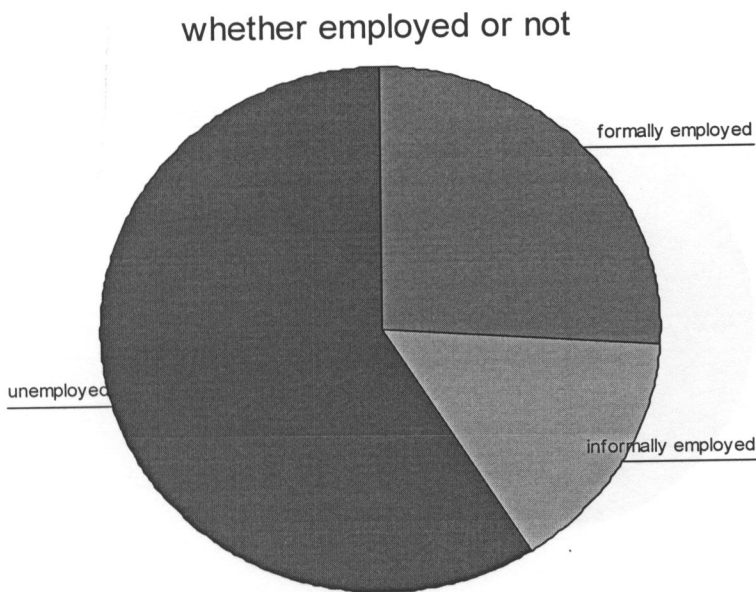


Figure 9. Chart showing employment status of parents who attended the clinic



5.16.4 Employment status of the spouses of parents attending the Maternal and Child Health Clinic at Chainama Clinic

64 per cent of the spouses were formally employed. 19 per cent were unemployed. 9 per cent were formally employed. 8 per cent did not answer the question and so their response was indicated as not sure.

Spouse employment

	Frequency	Percent
Formally employed	64	64.0
Informally	9	9.0
Unemployed	19	19.0
Not sure	8	8.0
Total	100	100.0

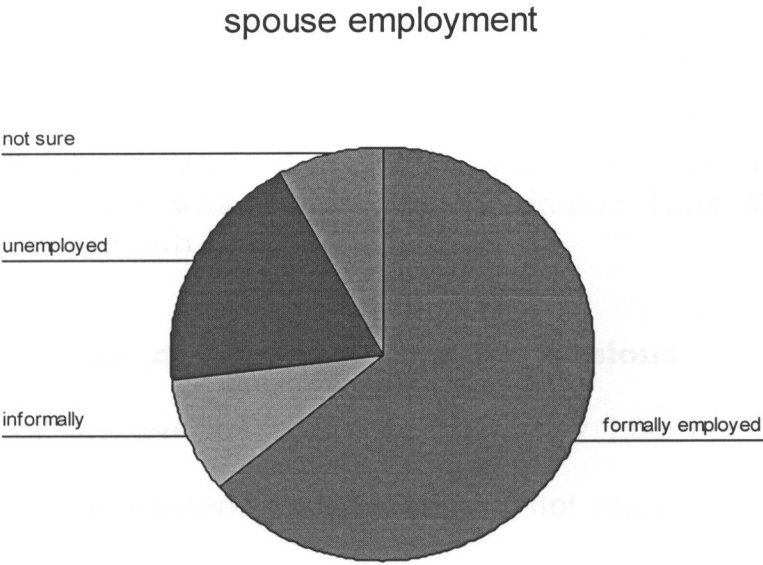


Figure 10. Chart showing employment status of spouses of parents who attended the Maternal and Child Health Clinic at Chainama Clinic

5.16.5. Provision of Nutrition Education Sessions

When the mothers/parents who attended the clinic were asked whether nutrition education was provided at the Maternal and Child Clinic at Chainama Hills Hospital, 44 percent agreed that nutrition education was provided. However, 54 per cent said that there was no nutrition education provided and 2 per cent did not answer the question and so their responses were labelled as not sure.

Provision of nutrition education sessions

	Frequency	Percent
Yes	44	44.0
No	54	54.0
Not sure	2	2.0
Total	100	100.0

Figure 11. Chart showing responses indicating whether nutrition education was provided at Chainama Hills Maternal and Child Health Clinic.

5.16.6 Location of nutrition education sessions

57 per cent of the parents indicated that they had not received any nutrition education sessions and so they did not answer the question as such their non-response was labelled as not sure. 40 per cent indicated that they held nutrition education sessions at the clinic. 2 per cent said they had received some nutrition education in the communities. 1 per cent said they had received nutrition education elsewhere other than at Chainama clinic and in their home.

Location of education sessions

	Frequency	Percent
Clinic	40	40.0
Homes and communities	2	2.0
Other	1	1.0
Not sure	57	57.0
Total	100	100.0

Figure 12. Table showing location of Nutrition Education sessions for parents attending Chainama Maternal and Child Health Clinic

5.16.7 Whether happy with venue or not

56 per cent indicated that they were happy with the venue while on the other hand 44 per cent indicated they were not happy with the venue.

Whether happy with venue or not

	Frequency	Percent
Yes	56	56.0
No	44	44.0
Total	100	100.0

whether happy with venue or not

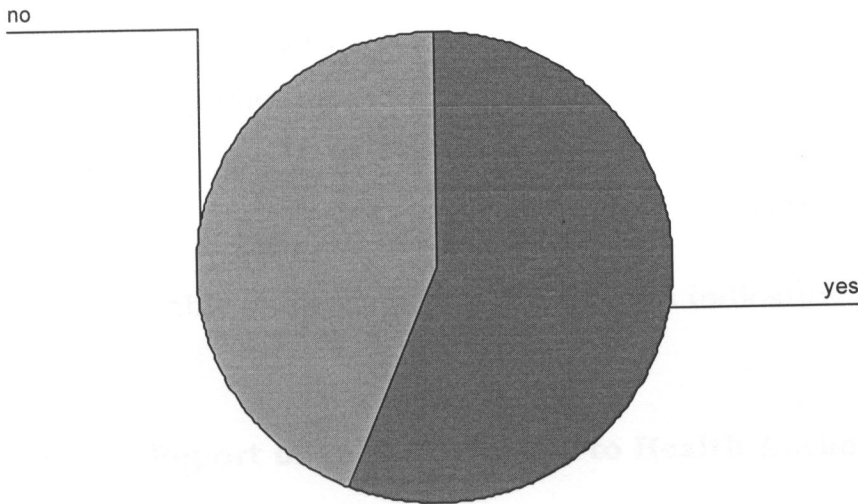


Figure 13. Chart showing whether or not the parents were happy with the venue

5.16.8 Why venue is good

When asked why they felt the venue was good, 57 per cent of the parents said they had not done any nutrition education so they did not answer the question and so their responses were labelled as do not know. 26 per cent indicated that the room was well ventilated. 9 per cent said the home was a good venue because it was good to have the nutrition education at home. 8 per cent said the clinic was good because it was centrally located.

Merits of venue

	Frequency	Percent
Good and well ventilated	26	26.0
Central to most mothers	8	8.0
Better done at home	9	9.0
Do not know	57	57.0
Total	100	100.0

Figure 14. Table showing parents’ responses indicating merits of venue

5.16.9. Report of venue demerits to Health Authorities

85 per cent did not answer the question on reporting the demerits to the venue and so were indicated as not sure. 15 per cent indicated that they did not report the venue demerits to the health authorities.

Are venue demerits reported?

	Frequency	Percent
No	15	15.0
Not sure	85	85.0
Total	100	100.0

Figure 15. Table showing report of demerits to health personnel

Perceived Distance from home to clinic

	Frequency	Percent
Far	26	26.0
Near	74	74.0
Total	100	100.0

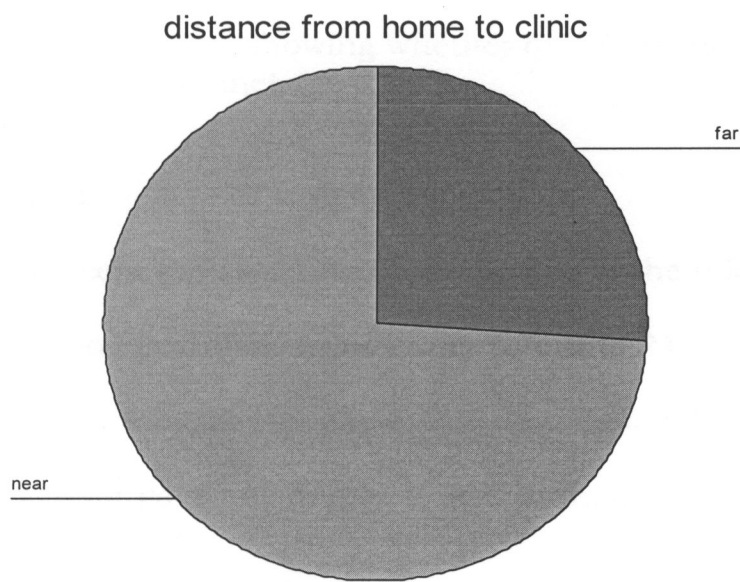


Figure 16: Chart showing responses on the distance from home to clinic

5.16.10 Expectations from nutrition education

46 per cent of the mothers talked to indicated that their expectations from the nutrition education provided were met. However 9 per cent indicated that their expectations were not met while 45 per cent could not give any answer and so were indicated as not sure.

Whether mothers' nutrition expectations are met

	Frequency	Percent
Yes	46	46.0
No	9	9.0
Not sure	45	45.0
Total	100	100.0

Figure 17. Table showing whether or not mothers’ nutrition expectations are met

5.16.11 Use of nutrition education

52 per cent indicated that they had used the information learnt from the nutrition education sessions. In contrast, 24 per cent of the respondents indicated that they had not used any of the information. The other 24 per cent never gave any response and so their responses were labelled as not sure.

Use of nutrition education

	Frequency	Percent
Yes	52	52.0
No	24	24.0
Not sure	24	24.0
Total	100	100.0

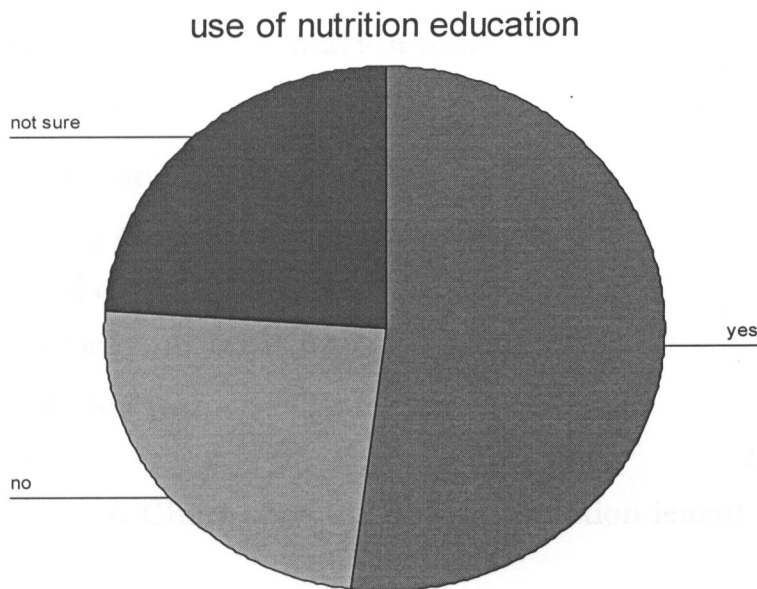


Figure 18. Chart showing responses on use of nutrition information by parents

5.6.12 Utility of information learnt

46 percent of the respondents did not indicate how the nutrition information learnt was used and so their responses were indicated as 'do not know' while 28 per cent said they used the information by preparing the dishes learnt during the nutrition sessions for their children. 13 per cent used the information for teaching other mothers in communities. 10 per cent of the respondents indicated that they used the information for the general care of their children and 3 per cent indicated the information learnt was used to assist them buy more nutritious foods than before.

How nutrition information learnt is used

	Frequency	Percent
preparation of food for child	28	28.0
teaching other mothers in communities	13	13.0
general care of the child	10	10.0
buy more nutritious foods	3	3.0
Do not know	46	46.0
Total	100	100.0

Figure 19. Chart showing how information learnt is used by the parents

5.16.13 Failure to use nutrition information learnt

73 per cent of the respondents did not answer the question. 7 per cent suggested that there was no nutrition lessons given there and hence was nutrition education advice to apply. 5 per cent of the respondents said they had no reasons for not using the information learnt; they just felt lazy to do so. 4 per cent said that there was no food to feed the children on so they could not use the nutrition education provided. The other 4 per cent said that they could not follow the lessons well enough for them to put into practice what they had learnt while another four per cent indicated that their children had never suffered from malnutrition so they saw no need of applying the nutrition education learnt. On the other hand, 3 per cent said that they were used to their own type of cooking so they saw no need of adopting and applying what they had learnt.

Reasons why nutrition information is not used

	Frequency	Percent
No food to feed child on	4	4.0
Cannot follow lessons taught	4	4.0
No lessons given so nothing to follow	7	7.0
No reasons, just feel lazy	5	5.0
Used to my own type of cooking	3	3.0
Child has never suffered from malnutrition	4	4.0
Do not know	73	73.0
Total	100	100.0

Figure 21. Chart showing responses on non-utilisation of nutrition education learnt.

5.16.14 Breastfeeding

29 per cent of the mothers who brought the children were breast feeding.
71 per cent were not.

Breastfeeding or not

	Frequency	Percent
Yes	29	29.0
No	71	71.0
Total	100	100.0

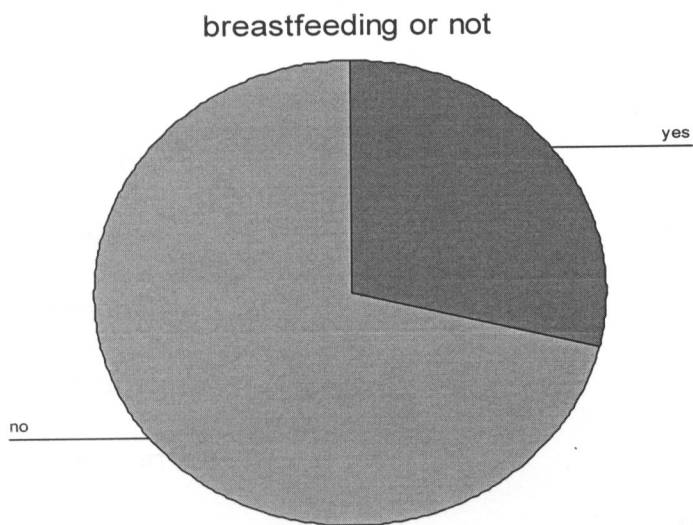


Figure 21. Chart showing breastfeeding status of the mothers who attended the Maternal and Child Health Clinic.

5.16.15 Weaning

62 per cent of the mothers responded that they weaned their children at the age 13-18 months. 15 per cent weaned the children at the age of 7-12 months. 62 per cent weaned at the age of 13-18 months. On the other hand 12 per cent fell weaned the children at the age of 19-24 months while 3 per cent weaned their children at the age of over 24 months.

Mothers responds as to when they wean children

	Frequency	Percent
0-6 months	8	8.0
7-12 months	15	15.0
13-18 months	62	62.0
19-24 months	12	12.0
Over 24 months	3	3.0
Total	100	100.0

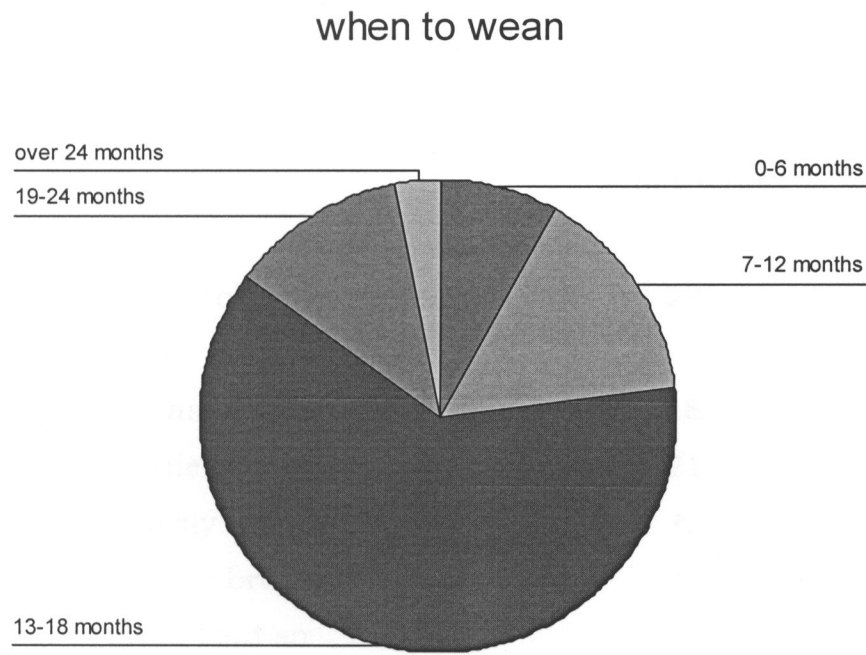


Figure 22. Chart showing when mothers weaned /are planning to wean the children

5.16.16 Reasons for weaning the children at specified times.

29 per cent of the mothers weaned their children because the children were refusing solids in preference to breast milk. 21 per cent weaned their children in order to go out for studies/work. 18 per cent weaned their children because they were viewed the children as old enough to stop. 12 per cent had no reason for weaning at whatever age. 8 per cent of the mothers weaned the children at the prescribed age in order to allow the children to breastfeed fully. 6 per cent weaned their children because the children voluntarily stopped breastfeeding. 3 per cent weaned their children because the father said so while the other 3 per cent weaned the children at a specific age as a way of spacing births.

Reasons for weaning at specified time

	Frequency	Percent
No reason	12	12.0
Child refusing solids in preference to breast milk	29	29.0
Child viewed as old enough to stop	18	18.0
To go for studies/work	21	21.0
Baby voluntarily stopped	6	6.0
To allow child to breastfeed fully	8	8.0
Father of child said so	3	3.0
Child spacing	3	3.0
Total	100	100.0

Figure 23. Table showing mother’s reasons for weaning/planning to wean their babies at specified times

5.16.17 Decision to wean

45 per cent of the respondents indicated that the wife decided when to wean. 40 per cent said that husband and wife decides when to wean. 9 per cent indicated that it was the husband who decided when to wean while 6 per cent said the grandmother decided when to wean.

Who decides when to wean

	Frequency	Percent
Wife	45	45.0
Husband	9	9.0
Husband and wife	40	40.0
Grandmother	6	6.0
Total	100	100.0

Figure 24. Table showing responses of respondents on decisions to wean

5.16.18 Perceived causes of persistence of malnutrition

28 per cent of the parents believed that the persistence of malnutrition in spite of the nutrition education provided was due to poverty. 23 percent indicated negligence by parents as the cause for persistent malnutrition despite the nutrition education provided. 20 per cent indicated non-adoption of nutrition education knowledge by mothers as the reason while 9 per cent said irregular sessions were the cause of malnutrition because most mothers remained illiterate on nutrition aspects. 9 per

cent indicated that most working mothers had little time to prepare food for their children. 8 per cent did not know why malnutrition was persistent despite the many nutrition education sessions provided by the clinic. 3 per cent cited unemployment as the cause.

Causes of persistence of malnutrition despite nutrition education

	Frequency	Percent
Poverty	28	28.0
Non-adoption of nutrition knowledge by mothers	20	20.0
Irregular nutrition sessions	9	9.0
Unemployment	3	3.0
Do not know	8	8.0
Working mothers have little time to prepare food	9	9.0
Negligence	23	23.0
Total	100	100.0

Figure 25. Table showing assumptions provided by parents on reasons for persistence of malnutrition despite nutrition education

5.16.19 Strategies for preventing malnutrition

Parents suggested some strategies for preventing malnutrition. 42 per cent said the clinic should provide more nutrition education sessions. 35 per cent said parents should work hard and be more committed to child’s health. 9 per cent suggested establishment of feeding programmes and cooking demonstrations. 6 per cent suggested prevention of hunger. 3 per cent said the clinic should give vitamins for the improvement of children’s health. 3 per cent said parents should have fewer children who they can feed properly. 2 per cent suggested that the Ministry of Health

and Ministry of Education publicise nutrition education like ‘child health week’.

Suggested prevention measures

	Frequency	Percent
Provide more nutrition education sessions	42	42.0
Publicise nutrition education like child health week	2	2.0
Establish feeding programmes and cooking demonstrations	9	9.0
Parents to work hard and be more committed to child's health	35	35.0
Give vitamins so that child's appetite picks up	3	3.0
Prevent hunger	6	6.0
Have few children	3	3.0
Total	100	100.0

Figure 26. Chart showing parents’ suggested preventive measures for reducing malnutrition

5.16.20 Nutrition education sessions in future

For future nutrition education sessions 39 per cent suggested that nurses conduct nutrition education in communities. 16 per cent said nurses should become friendlier. 12 per cent suggested publicizing nutrition education like child health week. Another 12 per cent said the clinics should increase time of nutrition education sessions. 9 per cent said the health authorities should provide feeding programmes and demonstrations every session. 6 per cent said clinics should give food

CHAPTER 6

DISCUSSION OF FINDINGS

6.0 INTRODUCTION

Malnutrition is not a problem of particular nations but it has been identified as a global issue affecting mainly developing nations like Zambia, where the economies are weak. Furthermore, in Zambia, malnutrition is a historical problem which dates back to the pre-colonial days when missionaries and wives of missionaries struggled to offer domestic science lessons formally and informally to improve the health and nutritional status of the new converts to Christianity Snelson, 1974. However, to date, it does not seem to be kept under control.

This scenario is further aggravated by certain demographic factors such as urbanization. Zambia is rated one of the most highly urbanised countries in Africa (CSO 2000:42). This has led to a greater number of people to move from the underdeveloped rural areas to urban areas in search of employment and assumed better prospects in all endeavors of life. Among the major implications of this phenomenon have been the rising unemployment and poverty levels and streetism in most of the urban areas sandwiched between major retrenchments due to liquidation of companies and closing up of major industries in the country. This scenario has led to rapid population growth in urban areas.

Lusaka province, in particular Lusaka District, is one such place which has been highly affected by urbanisation. It has the highest population growth rate in the country. The 2000 census pegs the population of Lusaka District where Chainama Hills Hospital is situated, at 1 084 703 people. However, the government has put in place certain strategies to prevent and combat malnutrition at various Maternal and Child Health Clinics. In spite of all these interventions malnutrition has persisted. It is for this reason that this research on communication strategies used to combat malnutrition and prevent malnutrition at Chainama Hills Hospital was conducted.

Discussion of Findings

The main aim of the research was as indicated earlier to find out the communication strategies used by the Maternal and Child Health Clinic at Chainama Hills Hospital to combat and prevent malnutrition with a view of outlining the successes and failures of the strategies. In order to make a comprehensive overview a number of research questions were structured into questionnaires and interview schedules to guide the research. These serve as a guide to discussing the findings.

6.1 Government Policy on Nutrition Education

Provision of health services and health personnel to implement health policies is a mandate given to Ministry of Health and adequate provision of this is every nation's desire. Nutrition is one concept that is of prime importance in health promotion as it is closely linked to the concept of malnutrition. However, the 1986 Ottawa Charter on Health Promotion argued that 'promoting health is more than just providing health services. Peace, housing, education, food, income, a sustainable environment, social justice and equity are all necessary for achievement of health. It calls for people to act as advocates for health through the addressing of political, economic, social, cultural, environmental, behavioural and biological factors.'

To this end, the Ministry of Health in conjunction with co-operating partners and the central government have provided a number of clinics. In each clinic and hospital it has provided a Maternal and Child Health Clinic with personnel to offer nutrition education to parents who attend the clinic in addition to all the other health duties such personnel offer. Findings in this research revealed that the nutrition and health communicators interviewed who were working at the time of the interview were mostly female nurses who comprised Zambia Enrolled Nurses (ZEN). Furthermore, 100 per cent of the communicators were nurses and were all female.

As such, most of the growth monitoring was done by the nurses. Since most of the interviews were conducted during the Child Health campaign week, some nurses were at the time deployed to a nearby community to enhance access to the mothers in their local community, a move that seemed to please most mothers.

6.2 Communication strategies and Nutrition education

100 per cent of all the Nutrition and Health communicators indicated that they played the role of nutrition educator in nutrition education sessions. They also unanimously stated that the type of materials used to educate mothers on nutrition education were print materials. Among the most popular ones mentioned were brochures, leaflets, charts, posters and booklets.

The nurses indicated that the materials were given out to every parent who indicated that they could read while those who could not read either took the materials with a view of affording their spouses a chance to read or other family members who could read for them. However, 81 per cent of the mothers interviewed were literate enough to read whatever materials the clinic might present. Although, in this case the situation seemed to be favourable, 19 per cent had qualifications below Grade seven which meant that most of them could not read and write

effectively. This in itself was a barrier to communication to the mothers who could not read. This was an indication that the nutrition education sessions required different communication strategies in the designing and dissemination of communication so that those who were disadvantaged by one method of communication could benefit from another.

Piotrow (1993) commenting on communication strategies says, 'once the strategic design for a communication programme is established, work begins on developing specific messages and materials to support that strategy.'

Furthermore, communication is a social process in the sense that whenever people interact they communicate. Essentially this communication starts from birth and goes on till death. Smith (1966:6-7) says people 'communicate through language and through codes of human interaction, communication and culture is inseparable while culture is a code learnt and shared.

Furthermore, learning and sharing require communication and communication requires coding symbols which must be learnt and shared. As such, anything to be learnt requires an understanding of people's culture and language as well as an understanding of the best

form of communication required for a particular target group such as the mothers attending nutrition sessions at the Maternal and Child Health Clinic at Chainama Hospital. In this vein, for the mothers who were not educated all the print materials used were irrelevant to them and could therefore not yield any behavioural change in them.

6.3 Participation

Research findings further revealed that 75 per cent of the communicators of nutrition education at the clinic did not know the person or organisations that developed the nutrition education materials and how the said nutrition education materials were produced because they were not involved in the production neither were they considered to be part of the development processes of nutrition education materials. 25 per cent of the personnel indicated that it was the Ministry of Health's Education Unit which developed the materials. The research further revealed that 75 per cent of the communicators did not know whether or not the target audience was identified prior to the development of the materials. On the other hand 25 per cent of the same group assumed that the target audience was never identified prior to the development of the materials.

This finding meant that the designers of the messages did not interact closely with the implementers (nutrition communicators – nurses at the maternal and child health clinic) in the development of the nutrition

messages. While acknowledging that nurses have a different job description from that of the Health educators at the Health Education Unit, it is, however, important to consider allowing nurses to participate in the basic planning and designing of nutrition messages considering that they are the educators and implementers of the nutrition education messages. They should also be oriented on use of any foreign material adopted for use in nutrition education so that contextualisation of certain concepts to the local environment is made easier. Furthermore, the audience is also required to participate in the message design if the messages are to be meaningful.

Poor communication between planners, communicators and the audience can lead to poor message adoption and may take time for the various stakeholders to identify this as a major cause of non-adoption of nutrition education by the audience. In addition, there can be very little shared meaning on certain aspects of nutrition known to nurses conducting nutrition education sessions and the target audience.

To emphasize these two points, Mody (1991:28) says, 'no national consensus or individual change can take place without dialogue: (a) within groups of people with homogenous needs, (b) between groups of people with different needs, and (c) between the public and planners

(e.g., government agencies, private voluntary organisations) claiming to meet their needs.' Kincaid (1979) in support says:

Audiences have different ways of thinking, different vocabulary, even different ways of interpreting drawings and photographs from those of the experts and officials who initiate communication programmes. The attitudes and predispositions - even the thought processes - of potential audiences need to be taken into account when communication is designed to address them. Messages need to be (1) based on information obtained from audience members themselves and (2) pre-tested with them to make sure that they were correctly designed. Only then can programme managers have a degree of confidence that audience members will interpret messages in the same way they were intended.

Audience participation has a great effect on behavioural change as it affects adoption of messages and so it should be highly considered all the time. The researcher therefore recommends that in future stronger participation be sought in message design by all stakeholders, particularly nutrition educators.

6.4 Nutrition Education

44 per cent of the mothers indicated that nutrition education was provided by the clinic. 54 per cent said that there were no nutrition education sessions and 2 per cent were not sure if there were nutrition education sessions held or not. This indicates that there is a problem. Perhaps the work is done as a 'by the way' kind of operation. This is far from adequate. To make a difference more should be done to institutionalize such nutrition education.

6.5 Target Audience

75 per cent of the communicators indicated that the target group for the nutrition education materials used in nutrition education sessions at the clinic targeted any one who went to the Maternal and Child Health Clinic regardless of their educational level. On the other hand 25 per cent said that they targeted women who went to the same clinic. This indicated that the clinic was open for anyone to take the children there.

In addition, the language of use in nutrition education was the local language or a familiar language in a particular area where the Maternal and Child Health clinic is situated. In this case, Nyanja was the popular local language used in the nutrition education sessions. However, use of local language did not seem to be a problem in the communication process since a number of mothers spoken to could communicate very well in Nyanja and the communicators were quick to code-switch to a familiar language of the mothers if they knew it.

6.6 Marital status

89 per cent of the respondents were married, 3 per cent separated, 3 per cent divorced, 3 per cent engaged and 2 per cent were single.

6.7 Highest educational level attained

Thirty-four per cent were Grade 12 and twenty-six per cent above grade 12, twenty-one per cent Grade 9, and nineteen per cent were below Grade 7. Generally, it was found that most of the mothers were educated enough to read and understand most of the materials presented and so there was probably a greater possibility of them adopting the information learnt. However, for the 19 per cent who were not literate enough were at a disadvantage when print materials were used in the nutrition education. They depended on other people to read and interpret. Greater effort should be made to use radio, television, and other audio-visual techniques to empower those who are illiterate. Electronic media have the capacity to surmount the literacy barrier.

6.8 Employment status of parents and their spouses

59 per cent of the parents/guardians who attend the clinic were unemployed. 26 per cent were formally employed while 15 per cent were informally employed.

64 per cent of the spouses of the respondents were formally employed. 19 per cent were unemployed. 9 per cent were formally employed. 8 per cent did not answer the question and so their response was indicated as not sure.

6.9 Expectations from nutrition education

46 per cent of the mothers talked to indicated that their expectations from the nutrition education provided were met. However 9 per cent indicated that their expectations were not met. This indicates that more needs to be done to strengthen both the quality and quantity of the education. 46 per cent is less than one half of all the respondents.

6.10 Access

74 per cent of the mothers attending the nutrition education sessions indicated that the clinic was near their homes. However, 26 per cent said that it was far. This implied that most mothers had easy access to the clinic, although more could still be done by the Ministry to increase the level of access either through creating more clinics or adopting more creative multi-media strategies to reach people in their communities.

6.11 Venue

56 per cent of the mothers indicated that they were happy with the venue while on the other hand 44 per cent indicated they were not happy with the venue.

26 per cent indicated that they liked the venue because Maternal and Child Health room at the clinic was well ventilated. 8 per cent said the clinic was good because it was centrally located.

The researcher asked the respondents if they had reported the venue demerits to the health authorities. 100 per cent of the respondents did not answer the question and no reasons were given for not doing so.

The response on the venue by communicators also showed that a hundred per cent of the communicators did not like the venue where they held nutrition education sessions. The venue was the Maternal and Child Health room. Upon querying them for the reasons why they did not like the venue, 75 per cent said the venue was inappropriate because it was too small and it lacked the equipment for conducting full-fledged nutrition education sessions. It seems that the 'super market approach' of the clinics added on to the congestion in the room. The 'super market' is a comprehensive approach of offering different services in one place, in this instance the maternal and child health clinic.

6.12 Persistence of malnutrition despite nutrition education

28 per cent of the parents assumed that the persistence of malnutrition in spite of the nutrition education provided was due to poverty. 23 percent indicated negligence by parents as the cause for persistent

malnutrition despite the nutrition education provided. 20 per cent indicated non-adoption of nutrition education knowledge by mothers as the reason while 9 per cent said irregular sessions were the cause of malnutrition because most mothers remained illiterate on nutrition aspects. 9 per cent indicated that most working mothers had little time to prepare food for their children. 8 per cent did not know why malnutrition was persistent despite the many nutrition education sessions provided by the clinic. 3 per cent cited unemployment as the cause. This confirms that malnutrition is a multi-faceted problem which requires multiple approaches if it is to be alleviated. All the answers have merit and one has to take into account of all of them if Zambia has to address nutrition problems facing children.

6.13 Relevance of materials

When asked about pre-testing of the materials prior to their development, 100 per cent of the communicators indicated that they had not pre-tested the materials since they were not the ones who developed the materials. Furthermore, none of them could remember taking part in a pre-testing exercise.

50 per cent of the communicators indicated that there was no checking of the component effectiveness because pre-testing was not done and had no reasons for doing so. 25 per cent said there was no checking of the

component effectiveness because the people that dealt with materials were those based at the district office. 25 per cent did not answer the question and so the response was indicated as not sure.

6.14 Dissemination plan of materials produced

100 per cent of the communicators indicated that they did not know if there were any dissemination plans anywhere for the communication materials produced. Furthermore, they indicated that they were not aware of any dissemination plans put in place at the clinic. They further indicated that materials were disseminated indiscriminately by giving them out to whoever attended the Maternal and Child Health Clinic after each nutrition education session or even without an education session as long as the clientele indicated that they could read and understand the language in which the material was written.

The idea behind giving out materials is for purposes of enhancing the nutrition education taught in the sessions. The mothers who are able to read and understand the materials given were able to draw meaning from the materials. However, those who were not able to read and understand depended on other family members to read and explain the meaning to them. This meant that they were likely to have their decisions on adopting and using the materials influenced by the family interpreters. On this issue Infante et al (1997) argues that communication channels

include both the mass media (e.g. print and electronic media) and interpersonal contacts’.

Furthermore, there are intermediaries between the media and the audience’s decision making’ such as opinion leaders who still exert influence on audience behaviour via their personal contact. Others are gatekeepers who are basically said to be ‘individuals who control the flow of information to a given group of people’ and ‘opinion leaders are usually quite similar to their followers. Therefore, mothers can only make independent decisions if they encode the messages on their own-that is if they were literate enough to read and understand the messages on their own.

6.15 Utility of nutrition education

24 per cent of the respondents indicated that they had not used any of the information. The other 24 per cent never gave any response and so their response was labelled as not sure. One contributing factor to this achievement in use of information can be linked to the high education levels of the mothers since 81 per cent of the mothers attending the clinic were Grade 9 and over.

6.16 Utility of nutrition information learnt

46 percent of the respondents did not indicate how the nutrition information learnt was used and so were indicated as not sure. 28 per

cent said they used the information by preparing the dishes learnt during the nutrition sessions for their children. 13 per cent used the information for teaching other mothers in communities. 10 per cent of the respondents indicated that they used the information for the general care of their children and 3 per cent indicated the information learnt was used to assist them buy more nutritious foods than before. This was also a good response.

Furthermore, the application of information learnt was an indication that knowledge learnt in the nutrition sessions had changed the attitudes of most respondents to an extent that they changed their nutritional practices by abandoning or modifying old knowledge and adopting and applying new nutrition knowledge learnt. This process of receiving new knowledge which changes one's attitude towards an idea is what is generally known as KAP. Tones, K and Tilford, S., (1994) say KAP is a strategy meant to provide knowledge about an innovation for purposes of changing old attitudes towards such an innovation so as to induce positive practices in individuals and groups of people in society. In the process of KAP; K stands for knowledge, A for attitudes and P for practices.

5 % of the respondents said they had no reasons for not using the information learnt they just felt lazy to do so. 4 per cent said that there

was no food to feed the children on so they could not use the nutrition education provided. The other 4 per cent said that they could not follow the lessons well enough for them to put into practice what they had learnt while another 4 per cent indicated that their children had never suffered from malnutrition so they saw no need of applying the nutrition education learnt. On the other hand, 3 per cent said that they were used to their own type of cooking so they saw no need of adopting and applying what they had learnt.

It is quite evident that nutrition education was not used for various reasons ranging from failure to comprehend the nutrition education to lack of food and sheer laziness. Others even failed to communicate the reasons for their non-utilisation of the knowledge gained from nutrition education sessions. This is an indication that other methods of educating mothers on nutrition needed to be applied to capture the attention and interest to apply information learnt.

Hubley (1993:51-2) argues that 'a message will only be effective if the advice presented is relevant, appropriate acceptable and put across in an understandable way.' He further advises that 'a good advice should be epidemiologically correct, affordable, require minimum time/effort, realistic, culturally acceptable meet a felt need and easy to understand.' Factors like poverty acted as a barrier since some of the mothers

indicated they had no food at home to help them implement the messages learnt at the clinic.

6.17 Weaning

62 per cent of the mothers weaned their children at the age of 13-18 months. 15 per cent weaned the children at the age of 7-12 months. 62 per cent weaned at the age of 13-18 months. On the other hand 12 per cent weaned the children at the age of 19-24 months while 3 per cent weaned their children at the age of over 24 months.

29 per cent of the mothers weaned their children because the children were refusing solids in preference to breast milk. 21 per cent weaned their children in order to go out for studies/work. 18 per cent weaned their children their children because they were viewed as old enough to stop. 12 per cent had no reason for weaning at whatever age. 6 per cent weaned their children because they voluntarily stopped breastfeeding. 3 per cent weaned their children because the father said so while another 3 per cent weaned the children at a specific age as a way of spacing births. 8 per cent of the mothers weaned the children at the prescribed age in order to allow the children to breastfeed fully.

6.18 Persistence of malnutrition despite nutrition education

28 per cent of the parents assumed that the persistence of malnutrition in spite of the nutrition education provided was due to poverty. 23

percent indicated negligence by parents as the cause for persistent malnutrition despite the nutrition education provided. 20 per cent indicated non-adoption of nutrition education knowledge by mothers as the reason, while 9 per cent said irregular sessions were the cause of malnutrition because most mothers remained illiterate on nutrition matters. 9 per cent indicated that most working mothers had little time to prepare food for their children. 8 per cent did not know why malnutrition was persistent despite the many nutrition education sessions provided by the clinic. 3 per cent cited unemployment as the reason.

6.19 Strategies for preventing malnutrition

Parents suggested some strategies for preventing malnutrition. 42 per cent said the clinic should provide more nutrition education sessions. 35 per cent said parents should work hard and be more committed to child's health. 9 per cent suggested establishment of feeding programmes and cooking demonstrations. 6 per cent suggested prevention of hunger. 3 per cent said the clinic should give vitamins for the improvement of children's health. 3 per cent said parents should have fewer children who they can feed properly. 2 per cent suggested that the Ministry of Health and Ministry of Education publicise nutrition education like 'child health week' programme done in the month of December 2004 to enhance immunisation and malaria control and de-worming of children.

For the future, 39 per cent suggested that nurses conduct nutrition education in communities. 16 per cent said nurses should become friendlier. 12 per cent suggested publicizing nutrition education by introducing child health week. Another 12 per cent said they should increase the time of nutrition education sessions. 9 per cent said the health authorities should provide feeding programmes and demonstrations every session. 6 per cent said clinics should give food rations to vulnerable mothers. 3 per cent said health personnel should conduct door to door campaigns while the other 3 per cent said the clinic should continue to encourage mothers to give children food.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

INTRODUCTION

The research brought in a lot of salient issues in particular from the recipients of nutrition education. Furthermore, It also opened a Pandora's box for the nutrition educators to discuss the issues of concern on the way nutrition education was being conducted. In order for the conclusion to be concise enough the research were used as a guide to the discussions.

To what extent do communicators in Nutrition and child health promotion at Maternal and Child Health Clinic at Chainama Hospital follow principles of communication social change and procedures to change behavior?

In conclusion, the researcher found that a lot was required for the clinic to put in place a kind of communication meant to yield more social change. To some extent the communicators in nutrition and child health promotion at the maternal and child health clinic at chainama did follow some principles of communication social change and procedures to change behaviour. However, to some extent they did not do so adequately enough. Most of the personnel's incapability to follow the social change

procedures was not of their own making but it had a lot to do with the establishment, policy and resource availability and accessibility. Most of the personnel if not all were professionally capable of delivering nutrition education in an ideal way and they did indicate so. To adequately argue on this point and answer the first research question the researcher looked at the following aspects:

Communication is a social process which is interactive in the sense that whenever people interact they communicate. People communicate through various modes such as through language and through codes of human interaction communication and culture. In, addition communication and culture is a code we learn and share and learning and sharing require communication and communication require coding symbols which must be learnt and shared. As such any change of behaviour in society requires some knowledge and analyses of what culture or tradition, communication processes exist before embarking on difficulty new notation in such a society it is for this reason that effective communication should be an interactive process.

The communicators interacted with indicated that they mainly gave talks to mothers on nutritional and health aspects of the child. The group comprised of a mixed status ranging from social status to educational status. For example, an analysis of the group in terms of educational

level and employment reviewed that, thirty-four per cent were Grade 12. Twenty-six per cent were above grade 12. Twenty-one per cent Grade 9. Nineteen per cent were below Grade 7. The employment levels of the parents interviewed indicated that 59 per cent of the parents/guardians who attended the clinic were unemployed. 26 per cent were formally employed while 15 per cent were informally employed.

This meant that the level of understanding and application of nutrition education learnt varied a lot. Acknowledging that perception of issues is not uniform even in a homogeneous group, nutrition educators needed to use other strategies such as cooking demonstrations, audio-visual shows or popular drama to narrow the gap. This is due to the fact that communication like education is power as it influences the choices people make such as adopting nutrition education and so there is greater need for messages to be designed and presented in such a way that most people's behaviour are positively changed. This can be done involves use of various media as opposed to the use print media only media approaches.

One other factor that was observed by the researcher thought required attention was the fact that communication is always done for purposes of inducing behavioural change and adoption of new ideas or innovations. Furthermore, nutrition is a key concept in Health education due to the

fact that wrong application of nutritional principles and non-adoption of nutrition knowledge ultimately causes malnutrition and malnutrition is a health issue which requires adequate health communication to the clientele.

In addition, nutrition is a health issue and as such it is one concept that is high on the list of health communication. Health communication involves health education and nutrition education. Health communication basically involves building public healthy policy; creating supportive environments; strengthening community action; developing personal skills and reorienting health services. To argue on this point Piotrow et al (1997) states that 'the issue is no longer whether health communication can influence behaviour but now the issue is how to sharpen our understanding of communication to do a better job. Furthermore, this understanding will grow quickly as more health professionals recognize that communication is an investment and not an extravagance.' As such, effective communication as described above need to be comprehensive in nature to 'capture all in the net'.

In addition, the current health communication encourages audience participation in all aspects of communication as it views communication as dialogue not a monologue. To this Kincaid (1979) states that 'communication is a two way, interactive process involving two or more

individuals or groups in which all participants both encode (create and share) and decode (perceive and interpret) information until the goals of each shifted from monologue to dialogue...so that programme officials who attempt to by pass or shortcut this process by simply sending out whatever messages make sense or appeal to them should expect to have limited (unknown) impact on the audience

One distinct aspect that was lacking in the communication strategies used at the clinic. 100 per cent of the communicators interviewed who comprised of nurses with variant qualifications ranging from Zambia Enrolled Nurse to Zambia Registered Midwife said that they had so far only used print media in the form of brochures, leaflets, posters and sometimes newspaper articles to enhance their nutrition education. However, most clinics, not just Chainama clinic, use only lecture method to mothers at the clinic in a large group in the same way. This research found this approach to be one of the weaknesses of the nutrition education approaches.

In this regard, the health personnel needed to enable clinics and communicators to use various communication strategies which promote more dialogue than monologue. The reasons for this being that audiences have different ways of thinking, different vocabulary, even different ways of interpreting drawings and photographs from those of

the experts and officials who initiate communication programmes. As such, use of all types of media electronic and print could have created more opportunities for most mothers to appreciate and comprehend most of the nutrition concepts taught.

Impact of communication strategies on target audience

There was some evidence that to some extent the communication strategies used had impacted on the behaviour of the mothers in adopting nutrition education in their homes and communities. Out of the respondents interviewed, 52 per cent indicated that they had used the information learnt from the nutrition education sessions. This application ranged from personal use to teaching and advising other mothers in the community who could not go to the clinic for various reasons. There was also an indirect indication that decision making on issues concerning weaning was no longer an issue of society and other family members to do but the mothers who directly got messages from the clinic on weaning were making more decisions on when to wean than anybody else. This meant that with improved presentations of nutrition education many more mothers could be literate enough to handle the health of their children better.

Appropriate strategies yielding more behavioural change for particular audiences

The communication strategies used were particularly useful and appropriate to mothers who went to the clinic with some basic education to enable them supplement the nutrition education with the other print materials issued at the clinic. Furthermore, they were more likely follow the messages presented better than their counterparts who had never been in school or has left school before they could reach Grade 7. Therefore, there was some indication that the nutritional lectures given and the print materials used and issued to the mothers did to a some extent yield some behavioural change for particularly the audience that were literate. Most of the mothers talked to did indicate that the nutrition education learnt either supplemented, added on to the information they already knew or clarified some issues which were not previously well understood.

Perceived hurdles to the efforts and strategies to fight malnutrition

There were a number of assumed and observed hurdles to the efforts made in fighting malnutrition. Generally, the venue where the nutrition education was being undertaken was said to be inappropriate for ideal nutrition education to take place in. One of the reasons advanced was said to be the room being too small and congested by the nutrition

educators considering that there was no limit of mothers going to the clinic in each session. Furthermore, there seemed to be no resources for the nutrition educators to undertake nutrition cooking demonstrations and feeding programmes for the children anymore. This had compounded into offering theoretical nutrition education only.

Staffing levels at the clinic were also a contributing factor considering that the 'super market' approach while having its merits on providing a wide range of services to the mothers, it was a disadvantage to nutrition education because on days when the sessions packed with a lot of mothers requiring other services. This led to nutrition education sessions being postponed or not being done due to pressure of work by the nutrition educators who were mostly nurses providing other services as well. This fact was observed and revealed by both the mothers and nutrition educators.

To conclude, one can therefore, state that communication in particular interactive communication is a must in all types of education which is intended to induce behavioural change in individuals and groups such as the nutrition education offered at the Chainama clinic if diffusion of good nutritional practices is to be infused in the community.

However, diffusion of innovations such as good nutritional practices in society requires changing behaviour and to change behaviour of people is no easy task. It requires studying the determinants of such behaviour, knowledge levels, attitudes and practices that already exists and why they exist before applying in order to design appropriate messages for each target audience and selecting the most appropriate channels of communication for each target audience. Furthermore, it requires participation of all involved in the communication process the sender and the receiver in the planning and designing of the messages for shared meaning by all, ownership of messages thereby making the materials relevant to all stake holders.

In support of the above view, Piotrow et al (1997:18) argues that 'the attitudes and predispositions - even the thought processes - of potential audiences need to be taken into account when communication is designed to address them. Messages need to be (1) based on information obtained from audience members themselves and (2) pre-tested with them to make sure they were correctly designed.' However, in this research it was revealed that the Health Education Unit designed most of the materials used in clinics and sometimes it adopted globally agreed upon materials and distributed these to the clinics for educators to use in nutrition education sessions. This was found to be a very weak factor in that the communicators of nutrition education – the nurses at the

Maternal and Child Health Clinics probably even the nutritionist are not involved in the development of nutrition education materials neither are they given orientations on how best to present the materials to the variant clients.

Lastly in the recent past, agents of change seemed to have only one aim for their communication efforts that is to inform. As such information was being dished out to the masses without any considerations of how information was being received and indeed how it was being utilised. This kind of communication has gradually become less responsive to today's challenges. Consequently, agents of change are faced with the challenge to influence people's attitudes, behavioural patterns, beliefs and values.

This research therefore made a number of recommendations to the health authorities to assist in improving the communication strategies used in combating and preventing malnutrition.

RECOMMENDATIONS

As earlier indicated malnutrition is multi-faceted problem which require multi approaches to combating and preventing it. One particular basic approach was to allow the recipients of the nutrition education space for input . As such, the recommendations made in this research were a

combination of the assumed recommendations from the parents and nutrition educators interviewed during the research at the Chainama Clinic.

The following were the recommendations:

- Nurses should be friendlier to mothers especially to those mothers with undernourished children. Most mothers talked to said most mothers with undernourished children avoided the clinics to avoid being scolded and only appeared at the outpatient clinic when the children were seriously sick for treatment only.
- Mother friendly corners should be created just as the voluntary counseling and testing services are provided to counsel and motivate mothers with undernourished children seek help.
- Nutrition education should singularly be promoted by use of social campaigns as has been done on other health issues like malaria because it is a major issue of national concern not only among children but also among adults.
- There should be door to door campaigns in communities especially in high density communities.
- There should be regular training of nutrition educators on recent friendlier and effective communication and behavioural change strategies used in presenting materials in nutrition education sessions.

- The nutrition educators should use more mass media strategies to plan and present their nutrition education materials.
- Other strategies of presenting nutrition education should be utilised such as use of electronic media and popular theatre so as to carry everyone on board and reduce levels of non-adoption of nutrition education.
- There should be more practical participation and close cooperation between the Health education unit, nurses in clinics and the mothers (communities) in the message designs of materials meant for nutrition education sessions.
- More Nutrition education sessions should be conducted.
- Cooking demonstrations and feeding programmes should be introduced. This calls for the ministry of Health to solicit for support on this issue because malnutrition in most cases was the root cause of most diseases and deaths occurring in children and even among some adults.

In conclusion, positive nutritional practices can only be induced when the recipients of the nutrition education appreciate the messages presented to them using a channel they appreciate and also see the benefits and practicability of such ideas as well as their perception of the change agent. Therefore, this calls for well planned participatory messages and presentations and an appropriate venue with friendly

services as one major way the maternal and child health clinics and personnel can contribute to the combating and prevention of malnutrition.

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Appendix 1

COMMUNICATION STRATEGIES USED AT CHAINAMA HILLS HOSPITAL, LUSAKA, IN COMBATING AND PREVENTING MALNUTRITION AMONG CHILDREN.

An Interview questionnaire for communicators offering Nutrition and Health Education to mothers of children at Chainama Hills Hospital, Lusaka

1. Job Title.....
2. No. of years in service.....
3. Role played in applying communication strategies.
4. Type of materials used by Chainama Hills Hospital
1. print () 2. electronic media –Broadcast ()
5. Who are your target group?
.....
.....
.....
6. Where do you convey the communication messages to your target group?
.....
.....
.....
7. Is the place appropriate enough to convey messages that can yield positive change? Yes () 2. No ()
8. If yes, what makes it appropriate for your target audience?
.....
.....
9. If no, what makes the place inappropriate?
.....
.....
10. Who develops the materials used in the Nutrition education sessions?
.....
.....

11. Was the target audience identified for the materials prior to development?
1. Yes () 2. No ()
12. If no, what was/were the reason(s)?
.....
.....
13. Did you identify what the people already knew about the subject covered by the materials? 1. Yes () 2. No ()
14. If yes, what method(s) did you use?
.....
.....
15. If No, what was/were the reason(s)?
.....
.....
16. Did you investigate what the people's attitudes, beliefs, values or practices were in relation to the subject covered by this material?
1. Yes () 2. No ()
17. If Yes, what method(s) did you use to investigate?
.....
.....
18. If No, what was/were the reason(s)?
.....
.....
19. Were the materials pre-tested? 1. Yes () 2. No ()
20. If Yes, what component(s) of effectiveness did you look at?
.....
.....
21. If No, what was/were the reason(s)?
.....
.....
22. Was there a dissemination plan put in place for the material? 1. Yes () 2.No ()
23. If yes, what plan(s) was/were put in place?
.....
.....

- 24. If No, what was/were the reason(s)?
.....
.....
- 25. Was there a specific budget for dissemination of these materials?
1. Yes () 2. No ()
- 26. If yes, what was the total budget?
- 27. If No, what was/were the reason(s)
.....
.....
- 28. Was there a monitoring mechanism put in place for this material?
a. Yes b. No
- 29. If Yes, what was/were the mechanisms?
.....
.....
- 30. If No, what was/were the reasons(s)?
.....
.....
- 31. Was there an evaluation plan put in place for the material? 1. Yes () 2. No ()
- 32. If yes, what was the plan?
.....
.....
- 33. If No, what was/were the reason(s)?
.....
.....

Appendix 2

QUESTIONNAIRE ADMINISTERED TO PARENTS/GUARDIANS OF CHILDREN ATTENDING THE CHILD HEALTH CLINIC AT CHAINAMA HILLS HOSPITAL, LUSAKA.

1. How old is your child?

1. 0-6 months () 2. 7 -12 months () 3. 13-18 months ()
4. 19-24 months () 5. 25 -30 months () 6. 31-36 months ()
7. Over 36 months

2. What sex is the child? 1. Male () 2. Female ()

3. How many children do you have?

1. None () 2. One () 3. Two () 4. Three () 5. Four ()
6. Five () 7. Other ()

4. What is the child's birth position in the family?

1. None () 2. One () 3. Two () 4. Three () 5. Four ()
6. Five () 7. Other ()

5. Are you still breast feeding the baby? 1. Yes () 2. No ()

6. If yes, when are you planning to wean the baby?

1. 0 - 6 months () 2. 7 -12 month () 3. 12 -18 months ()
4. 19 - 24 months () 5. Over 24 months ()

7. Why have you chosen the period for weaning the baby?

1. No reason ()
2. Child refusing solids in preference for breast milk ()
3. Child viewed as old enough to stop ()
4. To go for studies/work ()
5. Baby voluntarily stopped ()
6. To allow child to breast feed fully ()
7. Father of child said so ()
8. Clinic says so ()
9. Child spacing ()

8. **In your home, who decides when, and how to wean the baby?**
 1. Wife () 2. Husband () 3. Both Husband and Wife ()
 4. Grandmother () 5. Other family members () 6. Clinic suggested time ()
9. **What is the age gap between the child and his/her young/older brother or sister?**
 1. Less than 12 months () 2. 12 -18 months () 3. 19-24 months ()
 4. 25-30 months () 5. 31-36 months () 6. Over 36 months ()
 7. None ()
10. **What is your relationship with the child?**
 1. Daughter () 2. Son () 3. Nephew () 4. Niece ()
 5. Grandson () 6. Granddaughter () 7. Sister / Brother
11. **Are you single, married, divorced or widowed?**
 1. Single () 2. Married () 3. Separated ()
 4. Divorced () 5. Widowed () 6. Engaged ()
12. **What is your highest educational level attained?**
 1. Below Grade 7 () 2. Grade 7 () 3. Grade 9 () 4. Grade 12 ()
 5. Over Grade 12 ()
13. **What do you do for a living?**
 1. Formally employed () 2. Informally employed () 3. Unemployed ()
14. **What does your spouse do for a living?**
 1. Formally employed () 2. Informally employed () 3. Unemployed ()
15. **Where do you live?**
 1. Low density area () 2. Medium density area () 3. High density area ()
16. **Which is the nearest clinic to your home?**
 1. Chainama clinic () 2. Other ()
17. **Is it far or near your home?** 1. Far () 2. Near ()
18. **What do you think are the causes of malnutrition in children?**
 1. Poverty () 2. Ignorance of nutrition () 3. Negligence ()
 4. Wrong priorities () 5. Not giving children food regularly
19. **Do the hospital personnel and others give you some nutrition education sessions?**
 1. Yes () 2. No ()
20. **If yes, where do they give you such education?**
 1. At the clinic () 2. In our homes in communities ()

21. **If no, why do you think the health personnel do not offer you nutrition education?**
 1. Lack of commitment by health personnel ()
 2. Health personnel too busy to do sessions ()
 3. Over-concentration on other activities ()
 4. Too many activities done in one place ()
 5. Disorganization by hospital personnel ()
 6. Do not know
 7. No equipment for nutrition education
22. **Is the nutrition education provided, good enough and does it meet your expectations?** 1. Yes () 2. No ()
23. **Are you happy with the venue?** 1. Yes () 2. No ()
24. **If yes, what is good about the venue?**
 1. Good and well ventilated () 2. Central to all mothers ()
 3. Better done at home ()
25. **If no, have you told the health authorities about it?**
 1. Yes () 2. No ()
26. **A lot of nutrition education has been given to mothers, why then does malnutrition continue to occur?**
 1. Poverty () 2. Non-adoption of nutrition knowledge ()
 3. Irregular nutrition sessions () 4. Lack of nutrition demonstrations ()
 5. Lack of government commitment to reduce poverty () 6. Unemployment ()
 7. Do not know () 8. Working mothers have little time to prepare food ()
 9. Negligence ()
27. **What do you think should be done to prevent malnutrition?**
 1. Provide more nutrition education sessions ()
 2. Publicize nutrition education like the child health week ()
 3. Establish feeding programmes and cooking demonstrations ()
 4. Clinics to give rations to vulnerable mothers ()
 5. Parents to work hard and be more committed to caring for child ()
 6. Give vitamins so that child's appetite picks up () 7. Prevent hunger ()
 8. Have few children
28. **Have you used any of the information you have been given in nutrition education sessions?**
 1. Yes () 2. No ()

- 29. If yes, how have you used the information?**
1. Preparation of food for child ()
 2. Teaching other mothers in community ()
 3. General care of child ()
 4. Guides weaning process ()
 5. Buy more nutritious foods
- 30. If no, why haven't you used the information?**
1. No food to feed child ()
 2. Cannot follow lessons taught ()
 3. No lessons given so nothing to follow ()
 4. No reasons, just feel lazy ()
 5. Used to my own type of cooking ()
 6. Child has never suffered from malnutrition ()
- 31. What advice would you give to the health personnel for them to offer better health and nutrition education in future sessions?**
1. Nurses to be more friendly ()
 2. Publicise nutrition education like child health week ()
 3. Nurses to conduct nutrition education ()
 4. Give food rations to vulnerable mothers ()
 5. Provide feeding programmes and demonstrations ()
 6. Conduct door to door nutrition campaigns ()
 7. Increase time of nutrition education ()
 8. Encourage mothers to give children food ()