

**THE EFFECTIVENESS OF COMMUNICATION FOR BETTER HYGIENE IN  
MARKETS: A CASE OF KALINGALINGA MARKET**

**By**

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**A report submitted to the University of Zambia in partial fulfillment of the requirements  
for the award of the Degree of Master of Communication for Development.**

**The University of Zambia**

**Lusaka**

**2021**

**DECLARATION**

I, Nancy Nkonde, declare that this report:

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## ABSTRACT

Hygiene is as important element to every individual and the society at large. Specifically, market hygiene has been a major concern for most markets in the world. This is as a result of poor water supply, poor drainage systems, and poor sanitation facilities such as toilets and poor garbage disposal. The standards of hygiene at the market are often low, a cause of concern for the municipal authorities. Despite some studies have been conducted on how best the municipal authorities can improve their services, the conditions in the markets keep deteriorating.

Over the years' markets in Zambia have been experiencing hygiene and sanitation problems for a very long time. Kalingalinga market is one of the markets that has been experiencing the same problem. The area has drainage problems, poor water supply, heaps of litter near where the traders sell food stuffs and has poor toilet facilities. This has been an ongoing problem for a long time now. Despite various efforts by government and other stakeholders, the market still experiences these problems. It is for this reason that this research aimed to establish the current levels of communication about better hygiene at the market in order to solve this problem.

Communication is an exchange of information or passing of information, ideas or thought from one person to the other or from one end to the other is communication. According to McFarland communication is, "a process of meaningful interaction among human beings (1994:56. In order for communication to be effective, the messages conveyed must be understood by the all the parties (sender and receiver) in the communication, assign similar meanings to the message and listen carefully. Therefore, this study sought to examine the effectiveness of communication conveyed by the council.

The study sought to examine the effectiveness of communication for better hygiene in Kalingalinga market. Specifically, the research sought to assess the current communication messages to promote better hygiene, and garbage disposal at Kalingalinga market. The study further sought to examine the communication channels used to achieve better hygiene at Kalingalinga market and find out the language used by the council to communicate with marketeers about better hygiene practices.

This researcher used the descriptive and exploratory designs. The descriptive design involved obtaining in depth understanding of how communication can be used to improve hygiene in Kalingalinga market. The explanatory design was used to analyse a cause-effect relationship because it was a small research that meant to explore this area.

To analyse data, Statistical Package for the Social Sciences (SPSS) and Excel were used. The data was presented in form of figures and tables.

Findings of the study revealed that the council use English to educate the marketeers about good hygiene practices as opposed to vernacular that they can understand. The common local language used in the market is Nyanja and Bemba. The study also revealed that majority of the marketeers did not complete Grade 12. About 1.1% went up to Grade 7, 52.8% went up to Grade 9, 32.6% completed Grade 12. Then only 2.2% are diploma holders who are able to understand English as a medium of communication which is used by the council to communicate to the marketeers. So 1.1% of Grade 7s plus 52.8% of Grade 9s comes to 53.9%. This percentage is the majority of the marketeers that do not understand English.

The researcher has recommended the council to use local languages to communicate effectively to the marketeers. It should also partner with churches in Kalingalinga to educate the community about the importance of hygiene in the market as well as use shows and drama to disseminate the messages so that people can understand effectively. Furthermore, the council should enhance their maintenance and construction of proper markets with toilets and development of a good drainage system. And also ensure that the garbage collection is collected at the same frequency as not doing so is resulting in garbage pilling up in markets and increasing the chances of having another pandemic.

## **DEDICATION**

This piece of work is dedicated to the marketeers countrywide who have endured poor hygiene and sanitation in markets that has indirectly or directly influenced the rise in diarrhoeal diseases that may cause death. May their silent cries for help never go unnoticed.

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## **ACKNOWLEDGEMENTS**

I wish to extend my gratitude to my parents Mr & Mrs Chindumba for their endless love and support and for instilling in me the spirit of hard work and perseverance. To my siblings, especially my brother Mark Chindumba, thank you for your support and encouragement. I would like to also extend my gratitude to my supervisor Dr Elijah Mwewa Mutambashiku Bwalya for his relentless guidance throughout the research. Finally, thank you to the respondents who took their precious time to participate in this research. Without you this piece of work could not have been realised.

## ABBREVIATIONS

<b>AWD</b>	Acute Watery Diarrhoea
<b>CSO</b>	Central Statistics Office
<b>CLT</b>	Central Limit Theorem
<b>DEPT</b>	Department
<b>EPPCA</b>	Environment Protection and Pollution Control Act
<b>FDG</b>	Focus Group Discussion
<b>FMOE</b>	Federal Ministry of Environment
<b>ICS</b>	Integrated Communication Strategy
<b>IEC</b>	Information Education and Communication
<b>LCC</b>	Lusaka City Council
<b>MDG</b>	Millennium Development Goals
<b>SI</b>	Statutory Instrument
<b>WHO</b>	World Health Organisation
<b>UN</b>	United Nations
<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>UTH</b>	University Teaching Hospital
<b>UNZA</b>	University of Zambia

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# CHAPTER ONE

## INTRODUCTION

### 1.1. Introduction

This chapter looks at the background information of the study, Kalingalinga Township in Lusaka, the statement of the problem, significance of the study, research objectives and research questions.

### 1.2. Background Information

Communication can be defined as the exchange of an information, thought and emotion between individuals of groups; in other words, communication plays a fundamental role in balancing individual and organizational objectives (Shipra and Garg, 2012). Communication is the activity of conveying information. Communication has been derived from the Latin word "communis", meaning to share. Communication requires a sender, a message, and an intended recipient, although the receiver need not be present or aware of the sender's intent to communicate at the time of communication; thus communication can occur across vast distances in time and space (Elegbe and Oyewo, 2014). Communication requires that the communicating parties share an area of communicative commonality. The communication process is complete once the receiver has understood the message of the sender. Feedback is critical to effective communication between parties.

Communication within organizations is classified into two groups as formal and informal. The types of formal communication are "up to down", "down to up", "horizontal" and "cross" communication. Nonverbal communication describes the process of conveying meaning in the form of non-word messages. Research shows that the majority of our communication is non-verbal, also known as body language. Some of non-verbal communication includes chronemics, haptics, gesture, body language or posture; facial expression and eye contact, object communication such as clothing, hairstyles, architecture, symbols infographics, and tone of voice as well as through an aggregate of the above. No matter how brilliant and invaluable your idea, it is worthless unless you can share it with others. For this reason, effective communication is crucial at every level of an organization. However, the ability to communicate effectively does not come easily to many people, and it is a skill that requires practice (Elegbe and Oyewo, 2014).

Effective communication is an essential component of organizational success whether it is at the interpersonal or intergroup or organizational or even external level. Communication may be understood as the Process of Exchanging Information and Understanding between People (Babu, 2018). Communication is the key factor in the success of any organization. When it comes to effective communication, there are certain barriers that every organization faces. People often feel that communication is as easy and simple as it sounds. No doubt, but what makes it complex, difficult and frustrating are the barriers that come in its way. Some of these barriers are mentioned below. Barriers to successful communication include message overload (when a person receives too many messages at the same time), and message complexity. Lack of effective communication renders an organization handicapped.

Language represents natural language but there are other artificial languages, such as sign-used by deaf and dumb or computer language. The spoken language is the one that helps us communicate with our fellow human beings in different circumstances: in the family, at school, among friends, at work, etc. The way we use language to make it efficient is what makes us good communicators. In relationships, communication plays an especially important role. It depends on how we communicate the organization's mission, as part of which they can be achieved, and we have a successful career that we choose. Regardless of the place of work, no matter who is our basic professional band, which helps us take decisions, express thoughts, ideas, feelings, attitudes and so we are understood and appreciated.

Market hygiene has been a major concern for most markets in the world. This is as a result of poor water supply, poor drainage systems, poor sanitation facilities such as toilets and poor garbage disposal. The standards of hygiene at the market are often low, a cause of concern for the municipal authorities (Kalaallisut, 2010:8). Despite some studies which have been conducted on how best the municipal authorities can improve their services, the conditions in the markets keep worsening. In Zambia, markets have been experiencing hygiene and sanitation problems for a very long time. According to Phiri, most of the markets managed by Lusaka City Council are in a very poor state although there are some that are better than others (2015:1). In other words, the quality of these markets is very poor as they lack good drainage systems, toilet facilities, bins for garbage collection and supply of water. Examples of these markets are Old Soweto, Chibolya, Kalingalinga, Chifundo and Buseko.

Hygiene in markets is a very important aspect that should be taken serious. A market place is one of the busiest places where food is affordable especially for people in townships. Therefore, poor maintainance of the market makes it vulnerable to many diarrhoeal diseases such as cholera, typhoid and dysentery (Ngondwe, 2013:10). Both the marketeers and the customers of all age groups are at risk of getting these diseases. For example, if a customer buys food that has not been properly washed due to poor water supply and ends up getting cholera, the community will be at risk. It has been observed that some customers rarely wash their vegetables because they see marketeers washing them before they sell. Unfortunately, little attention has been given to identifying whether the water they use is safe or not.

According to Markets and Bus Stations Act, Lusaka City Council has been given the authority to be collecting levies from the marketeers (2007:12). However, the quality of services provided to the markets is poor and this presents a major source of conflict between the Council authorities and traders who do not see any justification in paying Council levies. However, it can be seen that despite the efforts done by LCC to communicate on hygiene, it remains empirically unclear as to how effective their communication in these markets.

According to the Local Government Act of Zambia, councils are expected to offer among others the following services to their communities: construction and maintenance of public roads, streets, sanitary lanes, bridges and water lines and removal of all obstacles; establishment and maintenance of sanitation and drainage systems to facilitate the removal of refuse and effluent; establishment and maintenance of firefighting and prevention services in order to protect life, property and natural resources from damage by fire (1995:4). For instance, a physical check by another researcher Mulimba revealed that garbage which was supposed to be collected by Lusaka City Council was left to decompose in the market. This is devastating especially in the rainy season because the area is accompanied by floods (2007:6). These floods drag the garbage in the drainage ditches hence causing more health hazards.

Kalingalinga market has diverse commodities and activities that take place within. The market provides commodities and services required by a wide range of people. A high percentage of the food stuff found in this market is usually affordable as compared to supermarkets (Mulenga, 2001:2). Within markets, goods are sold in quantities that are required by the purchaser making

them affordable. Nyirenda adds that markets are also spaces of social interactions within the city (1957:5). Traders interact with their customers on a regular basis and reach levels of acquaintance where people can get goods on credit.

### **1.3. Kalingalinga Township in Lusaka**

Kalingalinga is a Nyanja word for a person who moves from place to place, denoting its previous role as a transit area. It is one of the oldest of the city squatter compounds and still one of the poorest (Mulimba, 2007: 3). The settlement is situated east of Lusaka city along Alick Nkhata Road. It is surrounded by the following areas: The University of Zambia (UNZA), Great East Road Campus to the north; The City Airport to the south, across Alick Nkhata Road; Helen Kaunda to the east and Mass Media Complex to the west. Its total surface area is about 682,389.5 square metres of flat land (Mulimba, 2007: 3).

The population of Kalingalinga consisted of 39,139 residents and 8,356 households as of 2010 (CSO 2010: 44). It has highest number of people in formal employment as compared to other settlements in Lusaka. They range from police officers, soldiers, medical officers, teachers to general office workers. The main reason is that the settlement is located near administrative and education centres such as the Judiciary, Government Ministries and Departments, Cabinet Office, University Teaching Hospital (UTH), Embassies, Hotels and the University of Zambia (UNZA). It is also due to better social infrastructure and facilities as compared to other settlements (Mulimba, 2007: 6).

The township also has a high number of unemployed people. These people survive through vending, selling vegetables in the markets and selling sand along the roadside. They also survive through carpentry, tailoring, tinsmith, metal work, piece works, making blocks, crushing stones and brewing illicit beer. Others work as maids, garden boys, security guards, drivers and prostitutes (Mulimba, 2007: 6).

#### **1.4. Statement of the problem**

Communication for Social Change is a process of public and private dialogue through which people themselves define who they are, what they need and how to get what they need in order to improve their own lives. It utilizes dialogue that leads to collective problem identification, decision-making and community-based implementation of solutions to development issues. It is communication that supports decision-making by those most affected by the decisions being made (Figuro, Kincaid, Rani & Lewis, 2002). Social Change promotes positive change in peoples' lives as they themselves define such change. However, communication for social change promotes a communication process that supports effective community participation, particularly of the most impoverished and marginalized sectors of society (Gumucio-Dagron, 2004). This process shifts control of media, messages, tools and content of communication from the powerful to the traditionally powerless. Ultimately, using such skills, previously powerless communities can become “self-renewing” – able to manage their own communication processes for their own good. The participation of social actors, who are in turn communicators, takes place within a process of collective growth that precedes the creation of messages and products such as a radio program, a video documentary or a pamphlet.

The LCC’s dream is to create a beautiful and clean city in which Solid Waste is managed properly. To realise this dream, The LCC has put Kalingalinga Market traders as part of its target audience of health improvement sensitisation programmes. This is simply because traders do their trading in highly sensitive places which if left unclean can be a danger to both environmental and human health. In such a scenario, information dissemination pertaining to hygiene practices becomes imperative in raising awareness of the dangers of ill-disposal of waste. According to Roy and Singh (2007:34), creating community awareness for citizens is a vital component in Waste Management. Karout and Altuwaijiri (2012:44) underscore this point when they say that most of the problems regarding waste disposal could be seen in countries where environmental awareness is lacking.

Lusaka City Council has long been providing information on hygiene to traders at Kalingalinga market through a variety of media and channels. What is surprising to note is that despite LCC’s effort, indiscriminate disposal of waste has continued to rise both inside and outside the market. It is therefore possible that LCC may not have communicated effectively about the necessity for

proper waste management by the traders or it is the traders themselves that just ignore LCC's SWM communications. This study assesses the effectiveness of the communication used by LCC in disseminating information on hygiene to the traders at Kalingalinga market.

The question that was sought to be answered was whether communication efforts had been mounted by the Council and other stakeholders to enlighten the locals of the dangers of hygiene. It was for this reason that this research sought to establish current levels of communications about better hygiene at the market, and how to solve the garbage disposal problem.

### **1.5. Significance of the study**

It was expected that results of this study would be beneficial to policy makers and workers in local government administration. Thus, the results obtained would enable Lusaka City Council to come up with better communication strategies to improve service delivery to markets. Furthermore, workers at Lusaka City Council would be equipped with the right knowledge to enable them provide quality services to markets. The information obtained provides insights to those wishing to research more on the same topic.

### **1.6. Research Objectives**

#### **1.6.1. Main Research Objectives**

The main objective of this study is to determine the effectiveness of communication to better hygiene at Kalingalinga market.

#### **1.6.2. Specific Research Objectives**

- Assess the current communication messages to promote better hygiene, and garbage disposal at Kalingalinga market.
- Examine the communication channels used to achieve better hygiene at Kalingalinga market.
- Find out the language used by the council to communicate with marketeers about better hygiene practices.

## **1.7. Research Questions**

### **1.7.1. Main Research Question**

How effective is the communication being used by Lusaka City Council to promote better hygiene in Kalingalinga market?

### **1.7.2. Specific Research Questions**

- What communication messages are being used in promoting better hygiene and garbage disposal at Kalingalinga market?
- What communication channels are being used to promote hygiene at Kalingalinga market?
- What language is used by the council to communicate better hygiene practices to the marketeers?

## **1.8. Theoretical and Conceptual Framework**

### **1.8.1. Theoretical Framework**

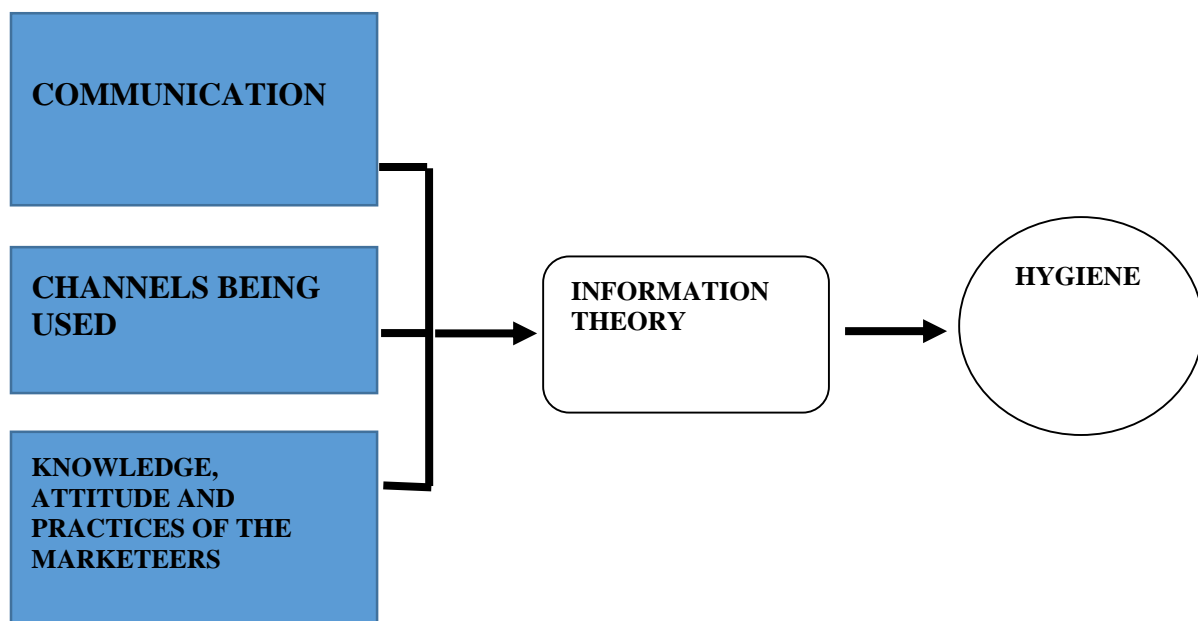
The study is motivated by the Information theory. The mathematical theory gave birth to the information theory of communication which views communication as the procedure through which one mind affects another mind or, to put it differently, the procedure for conveying a message meaningfully to the person for whom it is meant. It is a theory of transmitting signals, viz., written language, spoken words, body movements, etc. At the source one message is selected out of the many available ones in any of the available forms to be transmitted to the receiver. Provision is also made for feedback in many forms that flows from the destination back to the source, helping the communicator correct the subsequent output. The term 'message ' or 'information ' is not confined to news or facts, or to whatever is taught in the classroom, but also covers any content that reduces the uncertainty-and disorganisation of a situation.

This theory emphasises communication networks in which data are organised, ordered and related and such similarities and connections are shown as had previously not been perceived. Physical tests can be applied to verify predictions. This theory is heuristic, for it has led to new and previously unknown facts and methods. Chute (1987) adapted the Shannon-Weaver model by adding examples of message transmission media. While retaining the basic form of the communication, Chute suggested that various media could potentially serve as the 'source' in a

communication process. Chute's model is perceived as the initiator of interactive communication. Wagner (1994) stated that the models developed by Schramm and Chute can be used to help distance educators to conceptualise the mechanics of interactive telecommunication.

This theory seems well suited, particularly to this study because in a market setup using communication to better hygiene would require the full participation of the marketers. These marketers are people who have been communicated to by the LCC using various channels and markets at Kalingalinga are expected to give feedback.

### 1.8.2. Conceptual Framework



#### Independent Variables

**Communication:** is more complex than information; communication processes are composed of multiple complementary informative processes. Communication occurs if, and only if, information moves from the input to one process to the output from a second process, the latter process being the inverse of the first process.

**Channel** is the method a sender uses to send a message to a receiver. The most common channels humans use are verbal and nonverbal communication. Verbal communication relies on language and includes speaking, writing, and sign language. Nonverbal communication includes gestures, facial expressions, paralanguage, and touch. We also use communication channels that are

mediated (such as television or the computer) which may utilize both verbal and nonverbal communication. Using the greeting example above, the channels of communication include both verbal and nonverbal communication.

### **Dependent Variables**

**Hygiene** is more than just being clean. It is defined as the combined practices that help people to stay healthy (Advameg, Inc, 2009).

**Good hygienic practice** includes actions people take to stay healthy, like washing hands thoroughly and often, taking a shower every day, wearing clean cloths and keeping homes clean (Auger, Colinders, Bihn, Gravani & Embrey, 2005).

**Personal hygiene** may be described as the practice of maintaining cleanliness and grooming of the physical body. In common vernacular it is described by the phrase “looking after yourself” (Hygiene Expert (UK), 2000-2009).

**Health** is a state of general physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO, 2010).

**Hygienic practice** means that a person frequently engages in activities or behaviour that serve to promote or preserve health (Answers.Com, 2010).

Sanitation is the process of preventing human, animal and insect contact with excreta to avoid the spread of disease (Global Education, 2010).

**Environmental sanitation** is a package of measures that eliminate factors that encourage the proliferation of flies and the spread of disease. Some of these interventions include the provision of safe water, toilets and health education programmes to improve the personal and environmental hygienic practices of a population (Rabiu, Alhassan, Ejere & Evan, 2012).

### **1.9. Limitations of the Study**

This researcher had some challenges when conducting this research. The coming of the corona virus made people withdraw from work. So it was easy to find people in forces and carry out interviews. The researcher was a full time worker therefore, it was not easy to find time to do this research. The inability to understand other local languages that the marketeers use such as Nyanji proved to be a challenge for the researcher.

### **1.10. Conclusion of the Chapter**

Kalingalinga market has been experiences poor hygiene practices for a long time. The chapter aimed to explore the challenges at the market and also highlighted the objectives of the study, theoretical and conceptual framework as well as the limitation of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

The objective of this chapter is to provide an overview of the literature from authors dealing with communication strategies used in educating marketeers on how to help to keep markets and commodities they sell clean. To do this, a number of authors have been consulted in different countries and continents. This also helped the researcher to be well vested about matters concerning communication strategies used in sensitising marketeers and consumers in promoting

#### **2.2. Concept of Hygiene**

Hygiene is an important element in the livelihood of every individual. This is because it is a set of practices performed for the preservation of health. According to the World Health Organisation, hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases (2011:6). UNICEF adds that good hygiene is an important barrier to many infectious diseases, including the faecal–oral diseases, and it promotes better health and well-being (2012:8). To achieve the greatest health benefits, improvements in hygiene should be made concurrently with improvements in the water supply and sanitation, and be integrated with other interventions, such as improving nutrition and increasing incomes.

Following from the definition of hygiene, it is for that reason it could be said that market hygiene is very important in any given country. This is because markets often represent a health hazard because foodstuffs may not be stored properly and because the markets may lack basic services such as water supply, sanitation, solid waste disposal and drainage (Ndongwe, 2013:15). Ideally, markets should have several taps to provide traders and customers with ready access to safe water for drinking and washing. Many vegetable and fruit sellers regularly sprinkle their produce with water, and it is important that they have access to clean water for this. The sanitation facilities should also be appropriate for the number of people who visit the market, with separate facilities for men and women. Water and sanitation facilities for a market are often relatively easy to support by charging a small user fee, or by using part of the market fee to pay for such services (Mulenga, 2001:8).

## **2.3. Global Perspectives**

### **2.3.1. Study of communication strategies used in urban Indian slums**

According to the project conducted by the Business Innovation Facility in India, sanitation provision in urban Indian slums has long suffered from poor governance, disputed land and a lack of basic, supporting infrastructure (2012:6). The project aimed to explore sanitation solutions in the market and is based on a research study for Saraplast Private Limited (3S Shramik) a manufacturer and cleaning services enterprise for mobile toilets. This report provided an overview of the urban slum toilet market and presents consumer insights from a primary survey conducted across slums in three cities. Based on these, it recommended steps and critical design factors for setting up privately-run toilet facilities in urban slums.

The communication strategy used to help achieve the objective of the study was health education. An effective hygiene education aimed to create awareness, understanding and behavior change on sanitation. This study has analysed the awareness level on sanitation and the effectiveness of the prevailing Information, Education and Communication (IEC) approach among rural Indians. Focus Group Discussion and Survey methods were used to analyse the awareness level and effectiveness of IEC among the rural people. It exposes that awareness on sanitation is low. Unfortunately, it was observed that the possession of toilets in the households was also minimum and usage of toilet was still lower. The use of IEC by agencies to create sanitation or hygiene awareness was not being effective (Sriram and Maheswari 2011:5).

Therefore, based on the outcome the study suggested a new Integrated Communication Strategy (ICS) to improve the situation. ICS intensive campaigns for various target groups and levels that would create awareness and generate demand for sanitary facilities. Dissemination of the right message through the appropriate media to the key influencers and the public can alter the sanitation and hygiene behavior. However, the project mainly focused on building toilets and not entirely on other hygiene practices such as garbage collection which was the main focus of this research (Sriram and Maheswari 2011:5). Besides, the study did not show exactly which communication strategies could be used. The study just says ICS intensive campaigns and right messages through appropriate media. It fails short of mentioning these media channels and the right messages.

### **2.3.2. Study of the construction and the effects of markets, New Zealand**

A study was conducted by Nyamori in New Zealand (Construction and effects of markets in a local authority in New Zealand, 2009:9). In this study the author aimed to make intelligible the rationalities and mechanisms through which markets had been proffered as alternatives or compliments to traditional welfare based provision and the effect of this development on the subjectivity of workers. The research involved collection of archival data, personal encounters and in-depth interviews with managers, staff and elected representatives at a local authority in New Zealand. The findings of the study were that the mandatory changes required by legislation were associated with efforts to constitute local authority workers as business-like subjects through disciplinary mechanisms and technologies of the self. While markets had permeated this local authority, with some managers and staff claiming to work in a business-like manner and transact with each other as customers, these discourses had not vanquished the traditional concern of working for one organisation to serve the community.

The study of Nyamori is of great importance to this study in that it helped the researcher understand that local authorities need to work as entrepreneurs if they are to be effective in providing services to communities. However, Nyamori's study did not focus on the factors accounting for poor service delivery by local authorities in markets and the efforts to improve communication for better hygiene for marketeers which is the main objective of this research.

### **2.3.3. Study on knowledge, attitude and practice about waste management in Iran and**

#### **Philippines**

The study conducted in Iran was aimed at surveying the knowledge, attitude, and practice of Yazd University of medical science students about solid waste disposal and recycling. It was observed that on the whole, the knowledge of the students was inadequate. Above 66% of the students did not have any action in segregation and recycling of solid waste. It was concluded that all students must take part in formal and informal education classes to promote their knowledge in this regard (Ehrampouch and Baghian, 2005:13). However, the study did not focus on hygiene in markets which was the objective of this study instead it focused on solid waste disposal by students. Despite that it could be learnt that education for students was used as a communication strategy to promote knowledge, attitude and practice on waste disposal.

A similar study to assess village level of knowledge, attitudes and practices on solid waste management in Sta. Rosa City, Laguna, Philippines, observed that majority of the respondents were middle aged, female, college graduates, and earned zero to low-income. Their knowledge was positively related to education, income and age; attitude was positively related to education and income, while knowledge was the only variable correlated to practice. Other factors were found to make people act (Rosario and Jamias, 2010:5).

Therefore, in order to help people, practice the knowledge they had attained, effective interpersonal communication channels were used such as government workers, homeowners' association officials, or seminars or trainings. For media, cable television channels were explored. Various development communication strategies were drawn for the campaigns to sustain favourable behaviour.

## **2.4. African Perspective**

### **2.4.1. Study of hygiene knowledge practices in Choto, Ghana**

The study was conducted by Mundia (Assessment on Hygiene Knowledge and Practices, 2013:7). The purpose of this study was to explore and describe the knowledge and practices of hygiene that the residents of Choto possessed and to document their observable hygienic practices in the environment of their informal settlement in Katima Mulilo Ghana. The findings were that although the people in the Choto informal settlement had some general knowledge about hygiene, the extent of that knowledge was quite limited. The knowledge of hygiene was usually not carried out in practice by the residents for various reasons, which included poverty, insufficient water supply, insufficient knowledge and lack of access to sanitation facilities (Mundia 2013:5).

There were some communication strategies that were used to help residents practice the knowledge about hygiene. This was achieved through proper training and health education administered by teachers, family members, health educators and the media. Hygiene education comprised of a broad range of activities aimed at changing attitudes and behaviour to break the chain of disease transmission associated with inadequate water and sanitation. In the context of rural Africa, the provision of safe piped-in water for every household has not been achieved and the art of maintaining good hygiene assumes an added significance (Mundia 2013: 18).

It is important to note that hygiene education and promotion encourages people to replace their unsafe practices with simple, safe alternatives. Most people are only too happy to use clean water and safe sanitation facilities once they are readily available, but without knowledge of good hygienic practices, the health benefits will be greatly reduced (Mundia 2013:20).

The study, though it did not focus on hygiene in markets, is important in this study in that hygiene in markets can only be achieved if marketers have the full knowledge, attitude and can practice hygiene. There is need for the local authorities to come up with better communication strategies such as health education and training so that it can be enlightened on proper hygiene. This would help in the proper use of public services such as bins and toilets. Also some of the communication strategies included teaching children in schools about hygiene, health educators teaching the public and the media.

#### **2.4.2. Study from Oregbeni market in Benin City, Nigeria**

Environmental sanitation has remained an intractable problem in Nigeria with serious public health consequences. To address the enormous problems of environmental sanitation in Nigeria, the Federal Ministry of Environment (FMOE) through the National Environmental Sanitation Policy, identified market and abattoir sanitations as areas of concern. This was sequel to the overwhelming sanitation problems in markets and abattoirs that include improper refuse disposal, inadequate water supply, and gross inadequacy of sanitary facilities that result in open defecation and urination, as well as overcrowding and exposure of food and meat to flies, rodents and contaminants (FMOE, 2005:12). These problems were attributed to improper planning of markets abattoirs; the springing up of illegal markets and abattoirs (including slaughter slabs); lack of provision of adequate facilities such as potable water; inadequate road networks, institutional regulations, enforcement and monitoring; and above all, corrupt and sharp practices by the supervisors of markets and abattoirs (FMOE, 2005:12). Generally, markets occupy an important position in the lives of Nigerians and activities involved in buying and selling generate large quantities of solid waste that contain a large proportion of putrid vegetable and animal matter (Parks, 2007: 5). Markets attract large gatherings of buyers, sellers and especially pre-school children who have accompanied their mothers to markets. The coming together of buyers and sellers in the market provide opportunities for the spread of communicable diseases with considerable potential to reach epidemic dimensions.

Poor market sanitation in Nigeria has contributed to the spread of infectious diseases and environmental degradation. The study was undertaken to determine the awareness and practice of solid waste management in market places among market users. It involved 180 store owners and customers recruited from Oregbeni market in Benin City, Nigeria. This showed a high proportion of respondents who were aware of improper waste management (133; 62.8%) and agreed (174; 96.7%) that it is associated with many risks. Despite this high level of awareness, the practice of open dumping of waste was prevalent (108; 60.0%). Interestingly, 96.1% expressed willingness to pay for an improved waste disposal system while 55.6% rated the existing system as poor. The findings suggest therefore that there is an urgent need to improve waste collection, and disposal at market places (Abejegah et al 2013:5).

The study did not however, clearly highlight which communication strategies were used in ensuring that people practice good hygiene. It appears though that store owners and customers were physically brought together to discuss and find a way forward.

#### **2.4.3. A Study on sanitation problems in Kigali City, Rwanda**

Rwanda is one of the countries that is committed to achieving adequate sanitation goals and has set national goal encompassing sanitation. However, it has a lot of problems with sanitation. Sanitation problems in Kigali City are associated with a contaminated water supply and lack of adequate sanitation facilities. The country possesses abundant water resources and 85% of existing water sources are believed to contain coliform contamination levels beyond the recommended limits. Even though over 80% of the country's population has access to latrines, only 8% of these meet hygienic standards, a factor which contributes to coliform contamination. Waterborne diseases and poor hygiene related diseases are among the diseases which present the greatest health burden on the individual household and on the country. The aim of this work was to improve sanitation systems in the City of Kigali by analysing practices with respect to technology, provision and management of sanitation systems (Kayitesi, 2008:3-5).

The research found that existing institutional framework for sanitation sub sector was incompetent and needed capacity building of human resources and proper coordination of all key actors. Lack of sectoral laws, national guidelines, decrees and standards is still a challenge to national regulatory agencies. The study was focused on improving sanitation in households and not in

public places like a market. Furthermore, the research did not highlight any issues of communication strategies used to improve hygiene.

#### **2.4.4. Communication Strategy on Water, Sanitation and Hygiene in Liberia**

Liberia's fourteen-year civil conflict (1990-2003) greatly undermined its development prospects. The protracted conflict had a devastating effect on both infrastructure and the human development of Liberia, due to dried up investment for the country and many of the most qualified and experienced persons leaving the country. Post-conflict reconstruction of service delivery and sustainability of existing infrastructure remain to be one of the challenges. Rural water supply coverage was estimated at 51% in 2010 against the Millennium Development Goal target of 67%, while rural sanitation coverage is 17% against the MDG target of 57% (African Development Bank Group, 2012:8)

Additionally, Cairncross and Valdmanis explain that what constitutes a perfectly satisfactory water supply to some consumers leaves others, even in developing countries, considering themselves not served (2005:771). In much of rural Africa, a hand pump 500 metres from the household is a luxury.

In 2012, UNICEF had a Water, Sanitation and Hygiene for Diarrhoea and Cholera prevention programme, whose aim was to contribute towards promoting behavioural change among families and communities in Liberia. The focus was on the prevention of Acute Watery Diarrhoea and Cholera. It aimed to provide a framework for designing and implementing communication interventions on the issue across the country whose overall goal was: 'to increase the adoption of safe water, sanitary practices and hygiene among families and communities in Liberia contributing to the reduction of Acute Watery Diarrhoea (AWD) and Cholera' (UNICEF 2012:3).

The Long Term Communication Objectives for the framework were to:

- Increase in the percentage of families and communities that practice safer water, sanitation and hygiene behaviours by the end of 2015.
- Increase in the collaboration between various stake holding government ministries or departments, development partners, media and civil society organizations at all levels to advocate for as well as address issues related to water, sanitation and hygiene by the end of 2015.

- Increase in the number of communities actively participating in the management of water, sanitation and hygiene in their areas by the end of 2015.
- Increase in the percentage of families and communities who practice recommended water, sanitation, hygiene and treatment seeking practices during AWD and Cholera outbreaks by the end of 2015.

Meanwhile, the short term objectives for this framework were to:

Increase in the percentage of families who are knowledgeable about the importance of safe water, sanitation and hygienic practices and the risks of not following them by the end of 2013.

- Increase in the percentage of families who strongly believe that it is important to follow safe water, sanitation and hygiene practices by the end of 2014.
- Increase in the participation of various stake holding government ministries or departments, development partners, media and civil society organizations at all levels on issues related to water, sanitation and hygiene (including AWD and Cholera) by the end of 2013.
- Increase in the number of families and communities with the required skills and motivation to manage outbreaks of AWD and Cholera by the end of 2014.

The most effective means of promoting change was to work at the levels depicted above and using multiple channels of communication that are suited to the individual levels. The main communication approaches suggested for the different levels and achieving the communication objectives were advocacy, interpersonal communication, community mobilisation, supported and reinforced by mass media (UNICEF 2012:21).

#### **2.4.5. Solid Waste Management in Zambia**

According, to the study conducted by E. Sibanda (Solid Waste Management: How effective is the legal framework in counteracting the effects of solid waste management in Zambia? A case of Lusaka, waste management in Zambia was regulated within the broader framework of the Environment Protection and Pollution Control Act (EPPCA), 2010:12). The study reveals that the EPPCA together with the Waste Management Regulation of 1993; Statutory instrument (SI) No.

71 and the Hazard Waste Management Regulation (SI No. 125 of 2001) provided for specific procedures and practices for waste generation, storage, transportation and final disposal.

In addition, there was a Public Health Act of 1930 and the Local Government Act of 1999. Sibanda deduce that the existing waste management legislation although comprehensive for most types of the waste and these included among others the following: Domestic waste, comprising mainly of the waste generated from households; commercial waste, waste generated from commercial and business houses; industrial waste, waste generated various industries such as manufacturing, refining, chemicals and mining; hazardous waste, a type of waste with such characteristics as flammability, irritability, ignitability, corrosivity and toxicity; health care waste, waste generated from the health sector.

It is important to recognize Sibanda's research because it helps understand the broader framework through which waste management is regulated. Sibanda highlights a number of legislations which were being used to manage waste in Lusaka City. It is however, imperative to note that the study by Sibanda was aimed at determining how waste management in Lusaka was being regulated. His focus was not on determining what communication strategies would be used to help improve hygiene in markets and this was the gap filled by this study. However, the study by Sibanda was used in this research to ascertain the extent which the Lusaka City Council has enforced the existing legislation on waste management.

#### **2.4.6. Study of effective market management and service provision by Local Authorities, Zambia**

The study conducted by Phiri (Effective Market Management and Service Provision by Local Authorities, 2014:15) focused on the negative management of markets by the Lusaka City Council. He highlights the constraints which local authorities faced in providing services to marketeers. His findings helped this study because it elaborated more on why markets are still experiencing the problem of poor hygiene. Phiri points out that Lusaka City Council was not providing their services in terms of the following: in the area of waste management and sanitary administration, provision of firefighting facilities to markets, construction and maintenance of the drainage system at Soweto, Chelston and Kaunda Square markets, supply of water to markets and provision of toilet facilities to markets.

Phiri did not emphasize on what communication strategies that can be used to make people aware of the importance of hygiene and how they can achieve it despite the management challenges by the council. The marketeers when it comes to hygiene, should not wait on the council instead they should come up with ways on how they can better the market conditions.

## **2.5. Conclusion of the Chapter**

The preceding chapter has elaborated on how communication strategies have been effectively used in improving hygiene practices in some countries such as India, Iran, Ghana and Liberia. Some of the communication strategies that were used include health education, seminar or training advocacy, interpersonal communication, community mobilisation, supported and reinforced by mass media in most cases. This was done to help improve poor hygiene practices that affect the health and economics of the individual, family, community and the nation. Therefore, good hygiene is an important barrier to many infectious diseases, including the faecal–oral diseases, and it promotes better health and well-being. To achieve the greatest health benefits, improvements in hygiene should be made concurrently with improvements in using better communication strategies, water supply and sanitation, and be integrated with other interventions, such as improving nutrition and increasing incomes. Therefore, it is the important to use communication strategies that could help promote better hygiene among the marketeers themselves. This could help to reduce many infectious diseases in markets.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter seeks to discuss the methods used in data collection and analysis to answer the primary and secondary questions of research in research this study. According to Kothari, research methodology does not set out to provide solutions but offers the theoretical underpinning for understanding which procedure and set of procedures that can be applied to a specific case (2004, 31). Research methodology encompasses concepts such as research designs, target population, sample size and sampling procedure, data collection instruments and data analysis procedure (Kothari, 2004:31). It also gives an explanation of the research design, sampling techniques and methods used in data collection and the data once collected how it will be analysed.

#### **3.2. Research design**

This research applied both the descriptive and exploratory designs. The descriptive design involved obtaining in depth understanding of how communication will improve hygiene in Kalingalinga market. The explanatory design was used to analyse a cause-effect relationship between identified variables and their effect on hygiene. This research applied the two methods because they complement each other thereby maximizing on the benefits of each design.

A descriptive-analytical survey attempts to document current conditions or attitudes, that is, to describe what exists at the moment. Cohen and Manion (1986) assert that most research methods are descriptive, that is, they set out to describe and interpret what is, and are concerned with conditions or relationships that exist, practices that prevail, beliefs, points of view or attitudes that are held, processes that are going on, effects that are being felt or trends that are developing. According to Opoku (2000) a survey research has been one of the most widely used methods of data collection in the Social Sciences. The research design was appropriate because it enabled the researcher to ask questions that concern knowledge, attitudes and practices of Marketers at Kalingalinga markets on hygiene.

### **3.3. Research Methods and Instruments**

This study comprised both quantitative and qualitative information. This triangulation method adopted aimed to enhance the reliability of the research findings and to validate their quality. The application of both qualitative and quantitative methods in this research was meant to achieve the research objectives. The quantitative method was to help answer ‘what’ numbers or percentages involved while qualitative methods helped to find reasons why such percentages or biasness (Crewell, 2003:79).

The researcher used questionnaires, face-to-face, in-depth interviews were conducted with the participants. The researcher interviewed them by asking questions that had been formulated and articulated before the interviews. An interview guide, containing key questions, was used as a data collection instrument. The researcher then wrote into notebooks to record the statements made by the respondents during the interviews in answer to the questions.

### **3.4. Study Area**

The study was conducted in Kalingalinga market. There are various activities which are undertaken in the market. Therefore, the market was selected for this study because of the following reasons: it is a source of livelihood of people in Kalingalinga; various foods staffs are sold there; it has been struggling with poor hygiene. Thus, the researcher was able to get the required data related to communication for better hygiene at Kalingalinga market.

### **3.5. Study population**

The target population for this research consisted of all marketers at Kalingalinga market in Lusaka district. The number of marketeers is known to be 300, the number of respondents.

### **3.6. Study sample**

A sample size consisted of 100 respondents was selected from the population of 133. This sample size was selected so as to apply a principal of the central limit theorem (CLT) which states that a sample size of 30 or more drawn from a population follows the normal distribution.

$$n = \frac{N}{1 + Ne^2} ,$$

Where n is the sample to be determined, N is the total population size of the marketers and e=0.05.

$$n = \frac{N}{1 + Ne^2} = \frac{133}{1 + 133(0.05)^2} = 90.8 \approx 100$$

### **3.7. Sampling techniques**

Simple random sampling was used to draw respondents to ensure that each member of the population had an equal chance of being selected as subjects. The entire process of sampling was done in the single step with each subject selected independently of the other members of the population.

### **3.8. Data collection instruments**

The instruments that were used in collecting primary data will include questionnaires and in-depth interview guides. The questionnaire provided the quantitative data that was needed to study the effectiveness of communication in improving better hygiene while the in-depth interview provided the qualitative information that provided the in-depth information of the problem. The research also used direct observation from the interactions of the researcher and the participants.

#### **3.8.1. Questionnaires**

The researcher used questionnaires on market respondents as they are less time consuming and allowed marketeers to answer based on their experience and observation. They also allow the researcher easy distribution to a large sample size in a short amount of time. The questionnaire gave the marketeers time to respond at their convenient time as well as ask where they were not clear.

#### **3.8.2 In-depth interview**

In-depth interviews are a qualitative research method whose aim is to explore in depth respondent's opinion of view, experiences, feelings and perspective (Ritchie & Lewis, 2003:141). Individual in-depth interview provides an opportunity for detailed investigation and an in-depth understanding of the research topic in particular on how these key informants perceive the issue under investigation (Ritchie & Lewis, 2003:36). This method was used in order to acquire comprehensive views of the respondents or detailed information and they allow more detailed questions to be asked.

### **3.9. Data collection procedure**

Data was collected through primary sources by means of individual questionnaires and in-depth interviews. The questionnaires were answered by 90 marketeers. In-depth interviews were answered by the 5 council staff and 5 committee leaders at the market. During the entire primary data collection period, secondary data was used to gain an in depth understanding and critique the communication messages and channels used by Lusaka City Council.

### **3.10. Data analysis**

For quantitative data, the questionnaire was coded and the codes were entered into SPSS software for data analysis of the variables by use of graphs and charts for this study. In qualitative analysis, a narrative analysis approach was used. In-depth interviews were used to get a deeper insight and sub-categories that were formed with the aim of obtaining the final themes.

### **3.11. Data validity, reliability, pretest and trustworthiness**

#### **3.11.1 Pre-test**

The researcher ensured that instruments developed were reliable and valid by the following means. Firstly, the researcher pre-tested the questions on 15 respondents in the Soweto Market with similar characteristics of market users at the market circle.

This exercise enabled the researcher to identify the ambiguous, unrealistic, and wrong question which came from the responses and corrected them before the actual fieldwork. The pre-testing helped to update the instrument as well as give a clue to the researcher as to the length of time the data collection is likely to take and this helped in drawing up a proper schedule for the main data collection activity.

#### **3.11.2 Reliability**

To ensure the reliability of the instrument the test-retest method was used. The researcher administered the interview guide randomly and purposively to respondents in another market outside the study area. A second set was administered to different respondents in different market after an interval of two weeks with the same interview guide having a different numbering pattern. The test was reliable when basically the result showed consistency in the instrument since very similar responses were given. Reliability was established through simple correlation co-efficient

for analysis to lend the instrument to repeatability. Cohen & Manion (1996) explain that reliability is essentially a synonym for consistency and replicability of instruments and group of respondents, over time.

### **3.11.3 Validity**

The researcher submitted a draft of the proposed interview questionnaire to her academic supervisor for feedback on whether the questions could be considered valid for the intended study. Feedback indicated that some of the proposed questions were too personal since hygiene is a sensitive subject. This helped the researcher to re-examine the content, arrangement, logical sequence and the wording of the questions. The researcher was advised to construct objective questions. Validity suggests truthfulness or accuracy and refers to the match between a construct or the way a researcher conceptualizes the idea in a conceptual definition – and a measure. Construct Validity was used to ensure that the measure was essentially measuring what it was intended to measure, and no other variable.

The researcher also accessed relevant articles available on the internet, as well as articles available in hardcopy which address the subject of hygiene knowledge and practices in order to develop an open-ended questionnaire for the interviews.

### **3.12. Ethical considerations**

Ethics for research were employed to provide the researcher with guidelines for the conducting the study. Therefore, this guaranteed the study to be conducted in the best interest of the responders. Ethical considerations such as confidentiality consent and debriefing were fully applied. Ethical clearance from the University of Zambia Ethical Clearance Committee was sought by the researcher and duly granted before going into the field.

The respondents of the research were fully aware of the intent of the study. Further, the personal particulars of the respondents were to be treated with utmost confidentiality. Only individuals willing to participate in the study were subject as a respondent. Additionally, no form of deception was employed to alter the views of the respondents.

### **3.10. Conclusion of the Chapter**

Kalingalinga market is one of the busiest markets in Lusaka. It has been struggling with the problems of poor water and sanitation. The study was used to find out more information about the communication strategies that Lusaka City Council is using to reduce the issues poor hygiene practices that were being practiced by the marketeers there. Data was collected through primary sources by means of individual questionnaires and in-depth interviews. The questionnaires were answered by 90 marketeers. In-depth interviews were answered by the 5 council staff and 5 committee leaders at the market.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION

#### 4.1. Introduction

In this chapter the data is presented, analyzed and interpreted. Findings from the interviews and questionnaires regarding the demographics, the hygiene, knowledge and the practices of marketeers trading in Kalingalinga market are illustrated using narration based on identified themes.

#### 4.2. Background Characteristics

This section provides the background characteristics of the marketeers as sampling units in this study. These are sex, age, marital status, and their level of education.

A total number of 90 questionnaires were administered, out of which 89 were considered valid. One questionnaire was considered invalid as the respondent failed to complete the questionnaire.

##### 4.2.1. Market Composition

Kalingalinga market has been divided into three regions such as Old Kalingalinga market, Small Kalingalinga Market 1 and Small Kalingalinga market 2. Table 1 shows the distribution of the respondents accordingly. The table reveals that 49.9% of the respondents were from the Old Kalingalinga market, 18.0 % were from the Small Kalingalinga market 1 and 32.6% were from the Small Kalingalinga market 2. Old Kalingalinga market has more respondents than the small market 1 and 2 because it was the first market to be established in that area and has more infrastructure as compared to the small markets. The other two were established as a result of not having enough space at the old market.

		Frequency	Percent
Valid	OLD Kalingalinga Market	44	49.4
	SMALL Kalingalinga Market 1	16	18.0
	SMALL Kalingalinga Market 2	29	32.6
	Total	89	100.0

**Table 1: Market area**

#### 4.2.2. Sex Composition

Figure 1 shows that the majority of the study respondents were Female, constituting 56.18% of the sample size. 43.82% of the study respondents were Male. It was observed that female respondents were more than male respondents in the area because they are usually drop out of high school due to financial constraints and early pregnancies that lead to early marriages. And besides according to the Central Statistics Office, there are more women and men in Zambia. In Lusaka province 623,456 were males and 643,203 were females (CSO, 2010:15).

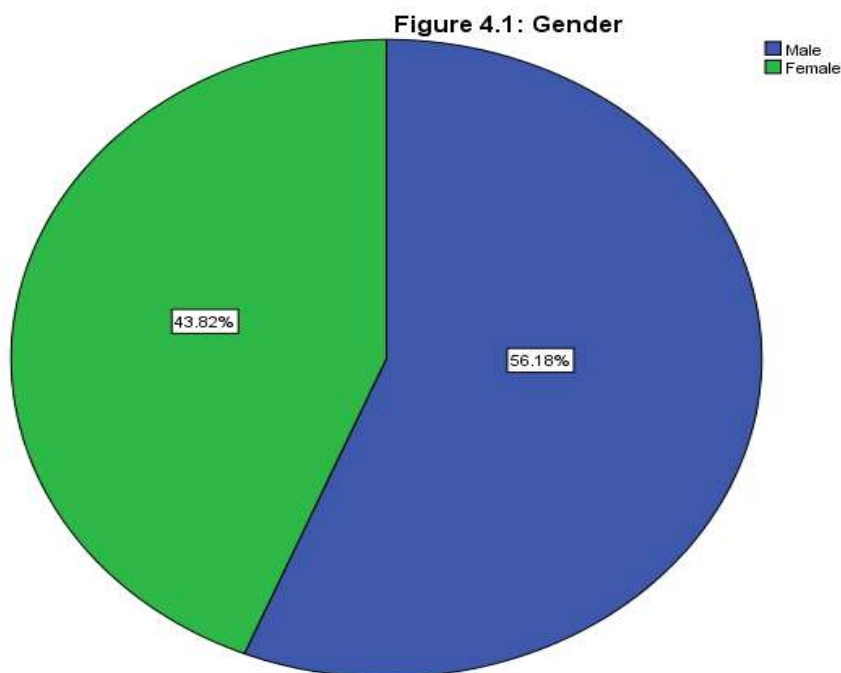
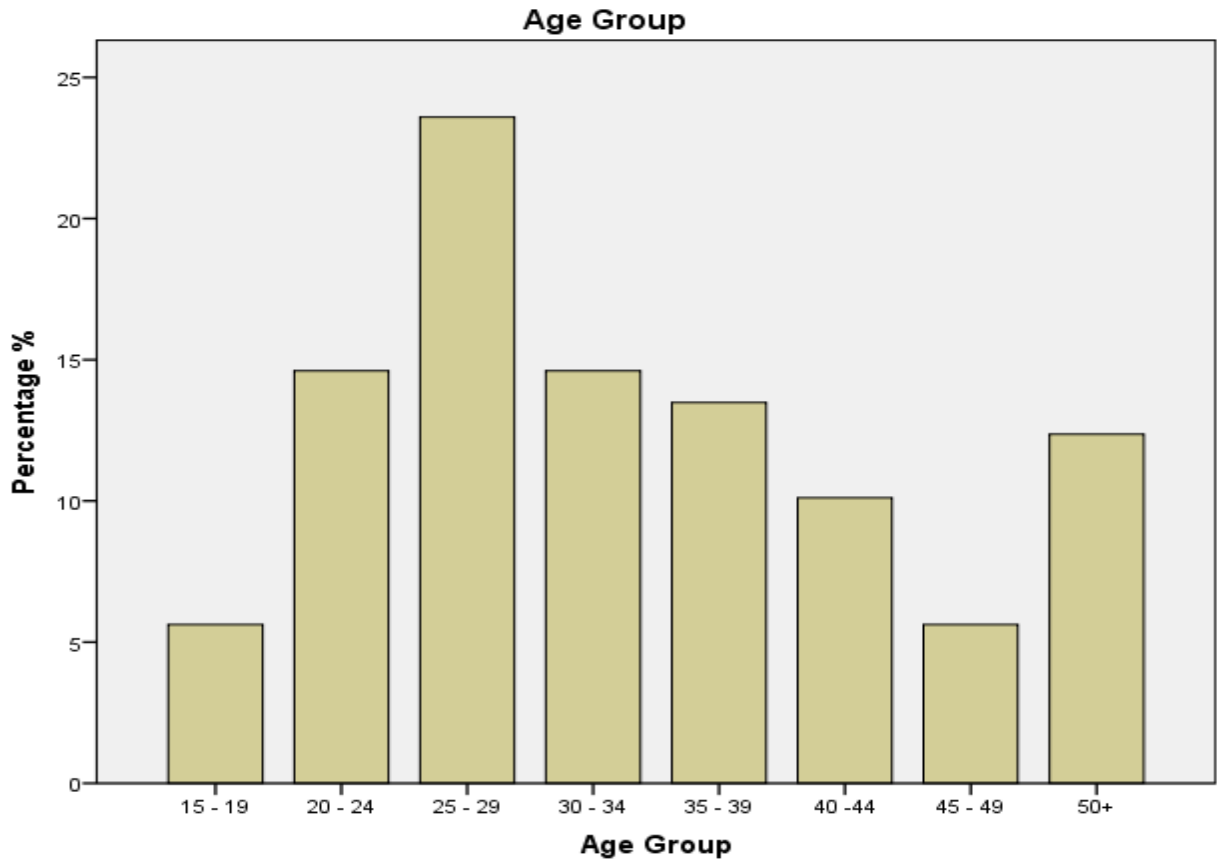


Figure 1: Sex composition

#### 4.2.3. Age Composition

Figure 2 shows that 23.6% of the respondents were in the age group 25-29, 14.6% of the respondents were in the age group 20 -24 and 30 – 34 respectively, 13.5% of the respondents were in the age group 35-39, 12.4% of the respondents were in the age group 50+, 10.1% of the respondents were in the age group 40 – 44 and 5.6% of the respondents were in the age group 15 – 19 and 45 – 49 respectively.



**Figure 2: Age group**

#### 4.2.4. Marital Status

Table 2 below shows that 53.9% of the study respondents were married, 42.7% were single and 3.4% were divorced.

		Frequency	Percent
Valid	Married	48	53.9
	Single	38	42.7
	Divorced	3	3.4
	Total	89	100.0

**Table 2: Marital status**

#### 4.2.5. Level of Education

Table 3 below shows that 52.8% went up to Grade 9 level, 32.6 % went up to Grade 10 – 12 level, 7.9% had never been to school, 3.4% went up to university level, 2.2 % went up to College level and 1.1% went up to Primary school level.

		Frequency	Percent
Valid	Grade 8-9	47	52.8
	Grade 10 – 12	29	32.6
	College level	2	2.2
	University Level	3	3.4
	Never been to school	7	7.9
	Primary school	1	1.1
Total		89	100.0

**Table 3: Level of education**

#### 4.3. Trading at the Market

Table 4 shows that all the respondents did trade from their respective markets.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	89	100.0	100.0	100.0

**Table 4: Trading at the market**

Table 5 shows that 67.4% of the respondents often traded 7 days in a week, 29.2% often traded 6 days in a week, 2.2% often traded 5 days in a week and 1.1% often traded for 3 days in a week.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7 days	60	67.4	67.4	67.4
	6 days	26	29.2	29.2	96.6
	5 days	2	2.2	2.2	98.9
	3 days	1	1.1	1.1	100.0
	Total	89	100.0	100.0	

**Table 5: Number of days of trading at the market**

#### 4.4. Payment for Sanitary Services

Table 6 below shows that the majority (70.8%) of the respondents paid for services to the council while 29.2% stated that there were no fees attached for services from the council.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	63	70.8	70.8	70.8
	No	26	29.2	29.2	100.0
	Total	89	100.0	100.0	

**Table 6: Payment of fees for sanitary services rendered by the council at the market**

#### 4.5. Fees charged by the council for sanitary services

		If yes, how much is the fee?			Total
		K 75 per month	K 50 per month	K 40 per week	
Market Area	OLD Kalingalinga Market	44	0	0	44
	SMALL Kalingalinga Market 1	0	16	0	16
	SMALL Kalingalinga Market 2	0	1	28	29
Total		44	17	28	89

**Table 7: Fees paid to the council per month for the sanitary services**

Table 7 shows that the 44 respondents from OLD Kalingalinga Market paid K 75 per month, 16 respondents in Small Kalingalinga Market 1 paid K 50 per month, while in Small Kalingalinga Market 2 paid K50 per month was claimed to be paid by 1 respondent and 28 respondents claimed that they paid K40 per month.

#### 4.6. Where are payments done?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Market Committee	89	100.0	100.0	100.0

**Table 8: Payments done to their respective market committees.**

#### 4.7. Services paid for

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Security, garbage collection, water provision	73	82.0	82.0	82.0
	Garbage collection and the Stand	16	18.0	18.0	100.0
	Total	89	100.0	100.0	

**Table 9: Usage of payment**

Table 9 shows that payments made were meant to be used for security, garbage collection, water provision as stated by 82% of the respondents while 18% of the respondents said payments were meant for garbage collection and the stand.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	73	82.0	82.0	82.0
	Yes only for garbage collection	16	18.0	18.0	100.0
	Total	89	100.0	100.0	

**Table 10: Is market sanitation (water provision and garbage collection) meant to be part of the package of this payment.**

Table 10 shows that 82% of the respondents stated that the package of the payment catered also for water and garbage collection.

#### **4.8. Communication messages being used in promoting better hygiene and Garbage disposal at Kalingalinga market**

To answer the research question, the researcher utilised Q.13, Q.14 and Q.15 of the questionnaire respectively. Table 11 shows that all the respondents stated that they thought communication helps to improve hygiene.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	89	100.0	100.0	100.0

**Table 11: communication as a leverage to improve hygiene**

In addition, Table 12 shows that 1.1% of the respondents were communicated to about hygiene while 98.9% of the respondents indicated that they were not communicated to about hygiene.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	88	98.9	1.1	1.1
	Yes	1	1.1	98.9	100.0
	Total	89	100.0	100.0	

**Table 12: Communication from council to improve hygiene**

Furthermore, Table 13 shows that 85.2% of the respondents were communicated to by Council, 13.6% were communicated to by ZANAMA and 1.1% were communicated to by the Councillor /Mayor.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ZANAMA	12	13.5	13.6	13.6
	Council	75	84.3	85.2	98.9
	Councillor/Mayor	1	1.1	1.1	100.0
	Total	88	98.9	100.0	
Missing	System	1	1.1		
Total		89	100.0		

**Table 13: Stakeholders who communicated to marketeers on sanitation**

#### **4.9. Communication channels being used to promote hygiene at Kalingalinga market.**

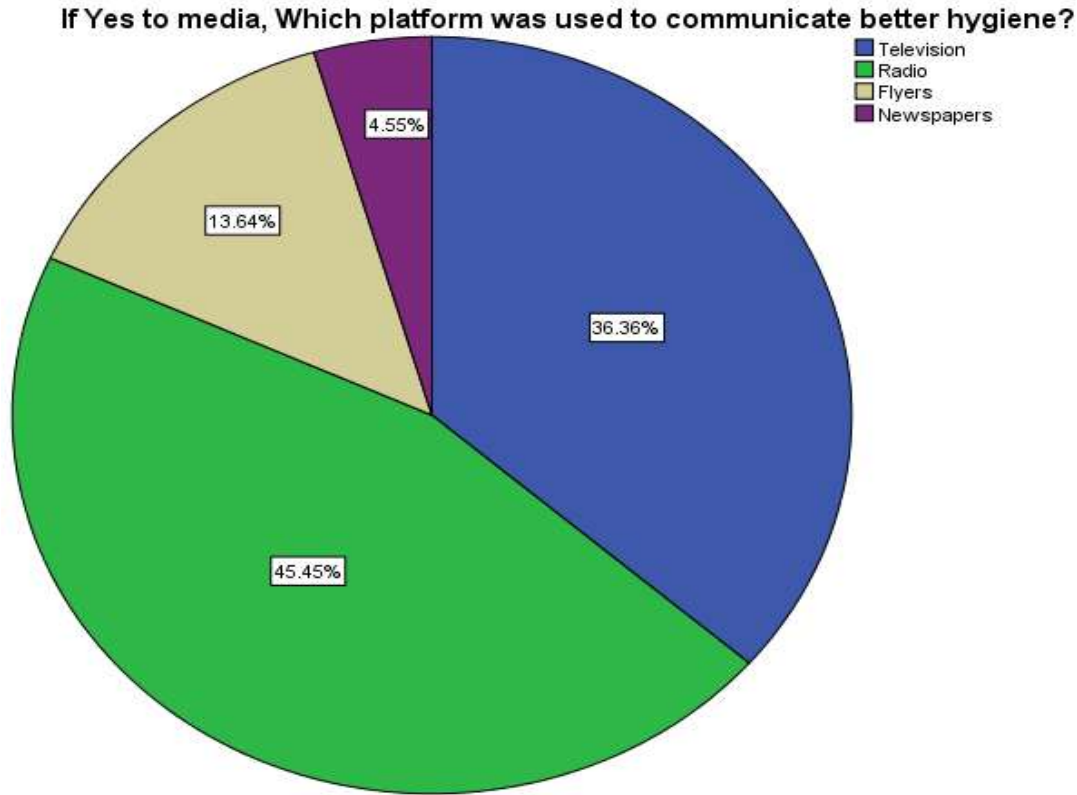
To address this research question, the researcher utilised Q.20, Q.21, Q.22 and Q.23 from the Questionnaire.

Table 14 shows that from the respondents that had stated that they were encouraged by the council to practice good hygiene, 72.8% stated that they were communicated to through Market Based Campaigns which include face to face sensitisation by health specialist and 27.2% from the Media which include television, radio, flyers and newspaper.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Media	22	24.7	27.2	27.2
	Market based Campaigns	59	66.3	72.8	100.0
	Total	81	91.0	100.0	
Missing	System	8	9.0		
Total		89	100.0		

**Table 15: Communication channels used to promote to better hygiene**

Figure 3 below shows respondents that stated that they used Media. The majority (45.5%) stated that a Radio was used, (36.4%) Television is (13.6%) Flyers and (4.5%) Newspapers.

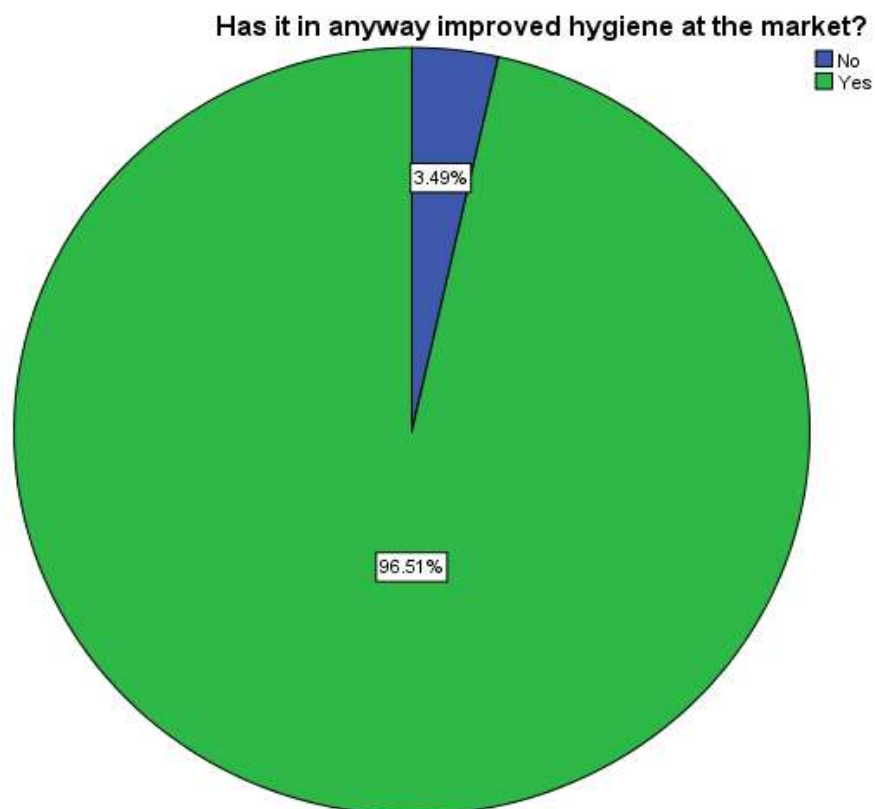


**Figure 3: The media channels used to communicate better hygiene.**

Figures 4 and Table 16 below shows that the majority (96.5%) of respondents stated that hygiene has improved as a result of council encouraging the marketeers to practice good hygiene.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	3.4	3.5	3.5
	Yes	83	93.3	96.5	100.0
	Total	86	96.6	100.0	
Missing	System	3	3.4		
Total		89	100.0		

**Table 16: Improvement of hygiene**



**Figure 4: Improvement of hygiene**

#### **4.10. Improvement in Communication**

Table 17 shows that (87.5%) of the respondents stated that there is no way in which the council can better their communication in promoting hygiene while 12.5% revealed that it was a way the council could better communication.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	77	86.5	87.5	87.5
	Yes	11	12.4	12.5	100.0
	Total	88	98.9	100.0	
Missing	System	1	1.1		
Total		89	100.0		

**Table 17: Whether council can improve on communication or not**

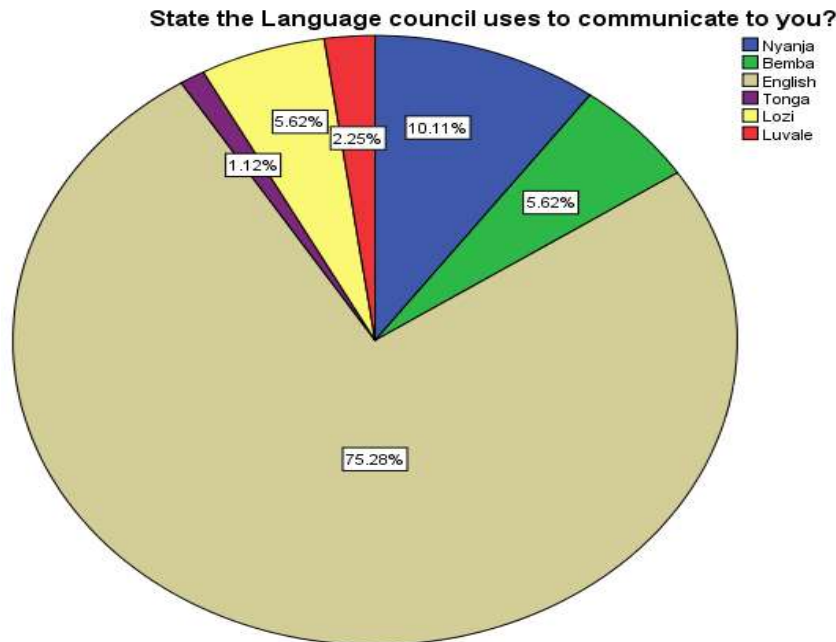
**4.11. Language used by the council to communicate better hygiene practices to the marketeers**

To answer the research question, the researcher utilized Question 27. Table 18 showed that 97.8% of the respondents stated that the Lusaka City council used various languages such as English, Nyanja, Bemba, Tonga and Lozi to communicate to the respondents on hygiene.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	2.2	2.2	2.2
	Yes	87	97.8	97.8	100.0
	Total	89	100.0	100.0	

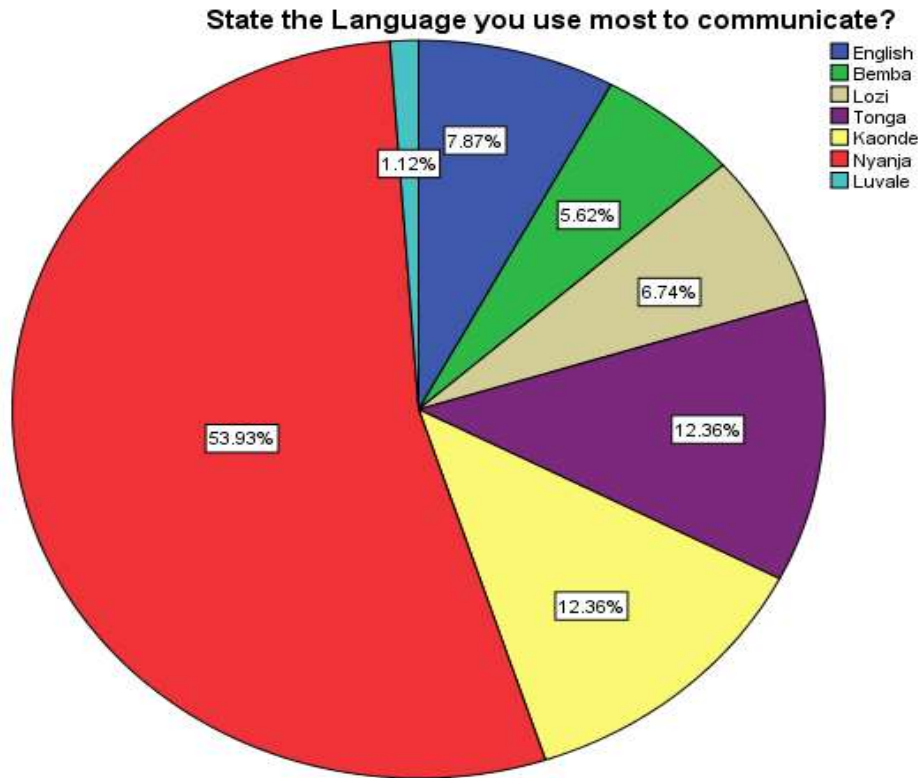
**Table 18: Language used by council**

Figure 5 shows that the Majority (75.3%) of the respondents stated that the council uses English to communicate better hygiene, 10.1% stated Nyanja, 5.6% stated Lozi, 5.6% stated Bemba, 2.2% stated Luvale and 1.1% stated Tonga was used.



**Figure 5: Language used by the council to communicate better hygiene**

Figure 6 shows that majority (53.9%) of the respondents use Nyanja mostly to communicate, 12.4% use Tonga, 12.4% use Kaonde, 7.9% use English, 6.7% use Lozi, 5.6% use Bemba and 1.1% use Luvale.



**Figure 6: Language mostly used by the Marketers**

#### 4.12. Interview results

This section presents the results from the Interview questions administered to the Lusaka City Council and the Kalingalinga Market Committee Executive.

##### 4.12.1. The Lusaka City Council Interview results

Lusaka was established as a settlement in 1913. The administration of Lusaka City Council is divided in two the first is a political wing headed by the Mayor while the administration part is led by the Town Clerk and eight directors representing eight departments namely: the Department of Human Resource and Administration, the Department of Legal Services, the Department of Engineering Services, the Department of City Planning, the Department of Public Health, the Department of Housing and Social Services, the Department of Finance, and the Department of

Valuation and Real Estate Management. The markets fall under the Department of Housing and Social Services and the markets are supervised by the Market Manager.

Lusaka City Council has many roles to play especially when it comes to market maintenance. The section of Waste Management at the council is in charge of making sure that there is good sanitation in the market. This section works hand in hand with the Market Advisory Committee. These are people who have been selling at the market for a long time and who are selected by the marketeers. They help coordinate the market and also collect levies. These levies are given to the council who use the money to help in improving the sanitation in the market. They use it to pay water bills, buy chemicals for the toilets and bins.

The council also sub-contracts garbage collection in some markets as they do not have adequate machinery to cater for the whole district. LCC provides trucks that collect garbage on a weekly basis from the markets. They also educate the marketeers on how they can keep their work stations clean the market. They usually use posters and market based campaign to sensitise the marketeers on the importance of good hygiene practices. One of the challenges that the council faces is that market levies are not enough to ensure that all the markets are properly managed.

#### **4.12.2. The Kalingalinga Market Committee Executive Interview results**

The Market Committee is responsible in making sure that the running of the market is smoothly done. All the three markets have separate committees but all operate with the same functions. The markets are being run by the marketeers themselves with the help of the committee which is elected by the marketeers themselves. They collect market levies which they use to pay electricity bills, water bills, security bills and garbage collection. They aim at ensuring that garbage is collected twice in a week to avoid cluster of waste. However, it has been a challenge for garbage to be collected on a weekly basis. In order to keep the market clean, they use posters, drama and door to door campaign on how marketeers can maintain hygiene in the market. However, it was found out that LCC is little or not involved in the running of the activities of the markets in Kalingalinga. All the three markets are run as a corporative were marketeers come together to select people that they feel can lead to run the affairs of the market.

Despite the council not being actively involved in all the activities of the markets, they at least provide the garbage trucks that collect garbage in these markets through sub - contracting. They also work in collaboration with health specialists to sensitise marketeers about hygiene and sanitation at the market. Unfortunately, the market is still having problems with drainages. The area of Kalingalinga continues to have blocked drainage which makes it difficult to maintain good sanitation. Water shortage is also another thing that the markets are facing. They do not have water pipes in the market so they hire young men to fetch water for them in homes so that they can use them for washing of vegetables and fruits as well as for the toilets. This is because the toilets are not flushable.

The committee collects market levy of about K75 per month (Old Kalingalinga Market), K50 per month (Small Kalingalinga Market 1) and K 40 per month (Small Kalingalinga Market 2) which is used to buy bins, pay for garbage collection, electricity bills and paying of security guards. Most marketeers learnt hygiene and sanitation from listening to radio and watching Television as well as being taught by health specialists. The council is also not involved in the running of the market. They just provide garbage collection trucks to collect garbage. However, garbage systems in Kalingalinga is in deplorable state and gets worse during the rainy season. This is mainly because the garbage is not consistently collected on a weekly basis. Instead it takes two (2) to three (3) weeks for the garbage to be collected which becomes a health hazard.

The market committees revealed that the council used various channels to sensitise marketeers on the importance of hygiene. The major channel was through inspectorate exercises; other channels include mass media. However, it was revealed that the council's lack of a written integrated communication strategy plan in promoting Hygiene among traders means that the channels being used are difficult to determine.

#### **4.13. Conclusion of the Chapter**

The study findings revealed that Kalingalinga market has been divided into three regions namely, Old Kalingalinga market, Small Kalingalinga Market 1 and Small Kalingalinga market 2. The findings established that the respondents mainly came from the Old Kalingalinga market. The majority of the study respondents were Female, constituting 56.18% of the sample size. The respondents were mainly between 25 -29 age group and the majority were married. The findings

revealed that the respondents mainly went up to Grade 9 and below level. The respondents mainly traded 7 days in a week. The respondents paid varying fees towards the running of the markets, for instance the respondents in the OLD Kalingalinga Market paid K 75 per month, in the Small Kalingalinga Market 1 they Paid K 50 per month and while in Small Kalingalinga market 2 they paid a K50 per month. All the respondents stated that they make their payments to their respective council committees. The payments were mainly meant to be used for Security, garbage collection, water provision. The respondents mainly stated that that the package of the payment catered also for water and garbage collection.

The findings revealed that all the respondents stated that they thought communication betters hygiene. The majority of the respondents stated that they were communicated to about hygiene. The majority of the respondents revealed that they were communicated to by Council. The respondents mainly stated that they were encouraged by the council to practice good hygiene through Market based Campaigns. The findings revealed that the majority of respondents stated that hygiene has improved as a result of council encouraging the marketers to practice good hygiene. The respondents mainly stated that there is no way in which the council can better their communication in promoting hygiene. The minority that stated that there was a way the council could construct proper markets with toilets and could build a good drainage system. The respondents mainly stated that the Lusaka City council collected garbage in their locale and that they often collected garbage at the market on weekly basis. The majority of the respondents stated that the council encouraged them to practice good hygiene.

The findings from the interviews conducted with the LCC management revealed that the markets fell under the department of Housing and Social Services and markets are supervised by the Market Manager. The LCC played a vital role in market maintenance. The department of Waste Management was delegated with the task of making sure that there is good sanitation in the market. This department works hand in hand with the Market advisory committee. The council also sub-contracts garbage collection in some markets as they have adequate machinery to cater for the whole district. LCC provides trucks that collect garbage on a weekly basis from the markets.

The findings further revealed that the Market committee is responsible for making sure that the running of the market is smooth. All the three markets have separate committees but all operate with the same functions. The markets are being run by the marketeers themselves with the help of the committee which is elected by the marketeers themselves. They collect market levies which they use to pay electricity bills, water bills, security bills and garbage collection.

## CHAPTER FIVE

### DISCUSSION OF THE RESEARCH FINDINGS

#### **5.1. Introduction**

In this chapter, the findings obtained from the interviews and questionnaires regarding the hygiene knowledge and the practices of marketeers trading in Kalingalinga market are discussed in detail using narration based on identified themes.

#### **5.2. Communication messages being used in promoting better hygiene and Garbage disposal at Kalingalinga market**

The findings showed that communication messages that the council has been using are not effective. This is because they use messages conveyed to the marketeers are in English as opposed to local languages that they understand. For this reason, the language barrier has really affected the effectiveness of the messages conveyed. The findings also showed that the respondents stated that they thought communication helps to improve hygiene. According to Sriram and Maheswari (2011:5) an effective hygiene education aims to create awareness, understanding and behavior change on sanitation. The study conducted in Indian slums analysed the awareness level on sanitation and the effectiveness of the prevailing Information, Education and Communication (IEC) approach among rural Indians (Sriram and Maheswari 2011:5). This implies that communication does have a bearing on the state of hygiene in Kalingalinga market. If communication is enhanced pertaining to hygiene practices the more hygiene would be enhanced in Kalingalinga market. It is for this reason the majority of the respondents stated that they were communicated to about hygiene. The majority of the respondents' findings showed that they were communicated to by the council while the others revealed that they were communicated to by ZANAMA and the councillor /mayor. The results show that better hygiene for the market is at the heart of all the stakeholders. Therefore, it could be seen that the council had taken a leading role in ensuring that they communicate better hygiene to the marketeers at Kalingalinga market.

### **5.3 Communication channels being used to promote hygiene at Kalingalinga market**

The findings showed that the majority of the respondents had been encouraged by the council to practice good hygiene, and they stated that they were communicated to through Market Based Campaigns which included face to face sensitization by health specialists and from the Media which includes television, radio, flyers and newspaper. According to Mundia, hygiene education and promotion encourages people to replace their unsafe practices with simple, safe alternatives (2013:20). Most people are only too happy to use clean water and safe sanitation facilities once they are readily available, but without knowledge of good hygienic practices, the health benefits will be greatly reduced. The actions of the council were motivated by the outbreak of cholera in Lusaka province which occurred in 2017 and lasted for a period of three (3) months. According to UNICEF, increase in the number of families and communities with the required skills and motivation to manage outbreaks of AWD and Cholera (2012:21). The respondents did confirm that hygiene at the market had improved as a result of the council encouraging marketeers to practice good hygiene.

### **5.4. Language used in communicating to marketeers promoting better hygiene at Kalingalinga market**

The findings showed that the council used English to educate marketeers about hygiene as opposed to Nyanja which is the most used language in the market. This makes it difficult for the messages to be conveyed effectively. As can be observed from the research done on the standard of education of the marketeers 1.1% went up to Grade 7, 52.8% went up to Grade 9, 32.6% completed Grade 12. Then only 2.2% are diploma holders and only 3.4% are degree holders. This implies that only grade 12, diploma and degree holders are able to understand English as a medium of Communication which is used by the council to communicate to the marketeers. The rest of the marketeers do not understand.

### **5.5. The effectiveness of the communication strategies used at Kalingalinga market for the promotion of better hygiene**

The messages that the council communicates to the marketeers has very little impact because people do not understand English. Effective communication only occurs when the recipients hear

what is being said by the sender. As such the communication strategies being used by the council to communicate better hygiene practices at Kalingalinga market are not very effective.

### **5.6. Challenges faced in communicating at Kalingalinga market for the promotion of better hygiene**

Language barrier has been one of the challenges hindering the promotion of hygiene in Kalingalinga market. The use of English instead of local languages such as Bemba, Nyanja, Lozi and Tonga has negatively affected the effectiveness of the messages conveyed by the council.

The use of health specialists to convey hygiene messages has also been very challenging. This is because specialists use technical language when conveying these messages. This makes it difficult for people to understand effectively. According to UNICEF (2012:21), the most effective means of promoting change was to work at the levels depicted above and using multiple channels of communication that are suited to the individual levels. Unfortunately, this has not been the case with Kalingalinga market.

### **5.7. Conclusion of the chapter**

From the research findings and the literature reviewed, it can be stated that the communication strategies used by the council is not effective. The research established that the use of health specialists to make marketeers aware about hygiene and the use of English as a language to communicate to them has had a negative impact. The research also established that the majority of the marketeers have not completed their high school education.

## **CHAPTER SIX**

### **CONCLUSION AND RECOMMENDATIONS**

#### **6.1. Introduction**

This chapter concludes the overall research paper. This chapter comprises the conclusion of the findings and recommendations.

#### **6.2. Conclusion**

This study aimed at investigating whether effective communication can be used to better hygiene in markets using Kalingalinga market as a case study. The results showed that communication had a strong bearing on bettering hygiene in Kalingalinga market even though the council has not been effectively communicating with the marketeers. The research revealed that the council uses channels that are not yielding the required results in the market. The channels used include radio, television, flyers and newspapers. Furthermore, the results showed that the market based campaign were usually conducted by the health specialists and not the council.

The research also revealed that the council usually uses English to communicate as opposed to the common vernacular languages used by the marketeers. The research showed that the majority of the marketeers have never been to school. About 1.1% went up to Grade 7, 52.8% went up to Grade 9, 32.6% completed Grade 12. Then only 2.2% are diploma holders and only 3.4% are degree holders. This implies that only grade 12, diploma and degree holders are able to fully understand English. This means that the majority of the marketeers do not understand English. As a result, marketeers do not understand the messages. Hence the communication strategies are not effective.

#### **6.3. Recommendation**

- The council should use local languages to communicate effectively.
- The council should also partner with churches in Kalingalinga to educate the community about the importance of hygiene in the market.
- The council should use shows and drama to disseminate the messages so that people can understand effectively.

- The council should enhance their maintenance and construction of proper markets with toilets and development of a good drainage system.
- The council should ensure that the garbage collection is collected at the same frequency as not doing so is resulting in garbage piling up in markets and increasing the chances of having another pandemic.

### **Future Research**

Research could be conducted on assessing the hygiene knowledge and practices for the marketeers. Perhaps there is need for the council to assess the marketeers knowledge on hygiene before sensitizing them about it.

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**APPENDICES**

**APPENDIX 1: Questionnaire Marketeers**

**COMMUNICATION FOR BETTER HYGIENE: A CASE OF KALINGALINGA MARKET**

Dear respondent,

I am a student from the University of Zambia researching on how communication can bring about better hygiene.: A case of Kalingalinga market, as part of my studies in a Master’s degree programme in Communication for Development.

The questionnaire is intended to help me collect information that is needed for analysis.

Be assured that the information you give will be treated with high level of anonymity and confidentiality, and shall only be used for academic purposes. However I ask that you provide correct and accurate information to the best of your knowledge as your views are paramount for the completion of this study.

**Do not write your name, unless you want to.**

**Tick  the answer of your choice in some cases fill in the blanks.**

- 1. Name (optional).....
- 2. Sex: 1.Male  2. Female
- 3. Age.....
- 4. Marital status: 1. Married  2. Single  3. Widowed
- 5. What is your education level?   
  - 1. Grade 9 and below [ ]
  - 2. Grade 10 – 12 [ ]
  - 3. College level [ ]
  - 4. University level [ ]
  - 5. Never been to school [ ]
  - 6. Primary school [ ]

**SECTION B**

- 6. Do you trade from this market? 1. Yes..... 2. No.....
- 7. How often do you trade from this market in a week? .....

8. Is there any fee attached for services from the council? 1. Yes ..... 2. No .....
9. If yes, how much is the fee?.....
10. To whom do you pay?.....
11. For what use is your payment meant to be?.....
12. Is market sanitation (water provision and garbage collection) meant to be part of the package of this payment?.....

**SECTION C: IMPORTANCE OF COMMUNICATION**

13. Do you think communication betters hygiene? 1. No..... 2. Yes.....
14. Have you been communicated to about hygiene? 1. No..... 2. Yes.....
15. Who communicated to you about hygiene? 1. ZANAMA.....2. Council..... 3. Councillor/ Mayor.....4. Member of Parliament.....
16. Does Lusaka City Council collect garbage in your locale? 1. No..... 2. Yes.....
17. How often does it collect garbage at the market?.....
1. Weekly
  2. Monthly
  3. Once in a while
  4. None of the above

**SECTION D: CHANNELS OF COMMUNICATION BEING USED**

18. How did you learn about good hygiene?.....
- .....
19. Has the council encouraged you to practice good hygiene? 1. No..... 2. Yes.....
20. If yes, how have they communicated to you? 1. Media..... 2. Market based Campaigns.....
4. Posters.....
21. Has it in anyway improved hygiene at the market? 1. No..... 2. Yes.....
22. Is there a way in which council can better their communication in promoting hygiene? 1. No..... 2. Yes.....
23. If yes state why? .....

**SECTION E: KNOWLEDGE, ATTITUDE AND PRACTICES OF MARKETEERS**

24. Do you think marketeers contribute to the maintaince of good hygiene in the market?

1. No ..... 2. Yes.....

25. What do you do to keep your market clean?.....

.....

26. Do you think people's attitudes will change if they had better sanitation services at the market?

1. No..... 2. Yes.....

27. If yes state how.....

.....

**Thank you for your completing this questionnaire.**

## **APPENDIX 2: In-depth Interview Guide for Officials at Lusaka city council**

- (1) Tell us more about your institution
- (2) What do you do in this institution?
- (3) How do you relate with marketeers in the maintenance of sanitation in the market?
- (4) What channels of communication do you use to communicate with the marketers?
- (5) What type of messages do you communicate to the marketers?
- (6) How effective are your messages to change behaviour and attitude of the marketeers on improving hygiene in the markets?
  
- (7) What system has the council put in place to ensure timely collection of garbage at Kalingalinga markets?
- (8) What are some of the problems faced by the council in collecting garbage from Kalingalinga market?
- (9) What do you think should be done to ensure effective collection of garbage in Kalingalinga Market?
- (10) What is it that the council is doing to improve the drainage system in markets?
- (11) What are the constraints in the way of improving the drainage system at Kalingalinga markets?
- (12) Does the council have a regular maintenance program on drainage systems in markets? (If yes, please give details of this program).
- (13) What should be done to improve the drainage system in markets?
- (14) What system have you put in place to ensure that markets are supplied with sufficient quantity of water?
- (15) What constraints does Lusaka City Council face in the way of improving water supply to Kalingalinga market?
- (16) What is it that the council is doing to improve water supply to markets

**Thank you for your cooperation.**

### **APPENDIX 3: In-depth interview for the Committe at Kalingalinga market**

- (1) What is the role of the committee in the market?
- (2) What messages do you use to communicate to the marketeers on importance of hygiene?
- (3) Do the marketers know the dangers of poor hygiene practices at the market?
- (4) What is their attitude and practices towards improving hygiene in the market?
- (5) What communication channels does the council use in facilitating hygiene practices in the market?
- (6) How do marketeers dispose of their garbage?
- (7) What system has the council put in place to ensure timely collection of garbage in your market?
- (8) Has Lusaka city council placed bins where garbage can be thrown by market users?
- (9) Who is in charge of collecting market fees from this market?
- (10) How much money do you collect in a day in terms of market fees from this market?
- (11) Does the market committee retain a certain percentage of the collected market levies?
- (12) What projects is this money expended on?
- (13) What do you think should be done to ensure timely collection of waste from your market?
- (14) Has Lusaka city council provided appropriate drainage facilities in markets so that water distribution points are kept free of standing wastewater?
- (15) Does the council regularly maintain drainages in your market?
- (16) What challenges do the council face in improving the drainage system in the market?
- (17) What is it that the council is doing to improve the drainage system in your market?
- (18) Do marketeers have access to a sufficient quantity of water for drinking and personal hygiene?
- (19) What is it that the council is doing to improve water supply to markets?
- (20) What do you think should be done to improve water supply to your market?

**Thank you for your cooperation.**