PERCEIVED FACTORS INFLUENCING UPTAKE OF LINDA MAMA MATERNAL HEALTHCARE DELIVERY PROGRAMME AMONG WOMEN IN INFORMAL SETTLEMENTS IN STAREHE SUB COUNTY, KENYA.

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A Research Project Submitted in Partial Fulfilment of the Requirements for the Award of the Degree Master of Arts in Project Planning and Management

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DECLARATION

The research project report is my original work and has not been presented for any examination in any other institution.

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To my dear parents, Mr and Mrs J. M. Mutungi whose positive outlook to education, hard-work and belief that everything is possible in God. You have been an inspiration to me.

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ABBREVIATIONS AND ACRONYMS

FMS – Free Maternal Services

I.D-Identity Cards

MOH- Ministry of Health

NACOSTI-National Commission for Science Technology and Innovation

NGOs- Non-Governmental Organisations

NHIF-National Hospital Insurance Fund

SPSS- Statistical Package for Social Science

ABSTRACT

Maternal health care delivery programmes in Kenya have been many majorly sponsored by the private sector and non-governmental organisations for a long time. The Linda Mama programme is because of the transfer of the Ministry of Health's Free Maternity Services (FMS) to the National Hospital Insurance Fund. Linda Mama is a program that seeks to promote equity in uptake of maternal health delivery programs in Kenya. The purpose of this study therefore was to investigate the perceived factors influencing uptake of the Linda Mama health care delivery programme among women in informal settlements. These perceived factors could be either positive or negative. The following specific objectives guided the study; to establish the extent to which demographic characteristics influence uptake of Linda Mama maternal health care delivery programme; to assess how the awareness of the programme influence the uptake of Linda Mama maternal health care delivery programme; to determine the extent to which attitude of the health care service provider influence uptake of Linda Mama maternal health care delivery programme; and to examine how quality of health care influence uptake of Linda Mama maternal health care delivery programme among women in informal settlement. The study adopted a descriptive survey research design.The population under this study entailed 80,309 (44,098 males) and (36, 620 females) living in Mathare slums as per 2009 Household Population Census and 433 medical practitioners in Pumwani Maternity Hospital. By applying the Yamane's formula of sample size, with a confidence coefficient of 95% at an error of 5%, the researcher sampled out 396 respondents for this study. Questionnaires and key informant interview schedules were used to collect data from the respondents, which was then analysed using SPSS version 20 and presented in tables, charts and narratives. The content and criteria validity of the data collection tools was established through a pilot study over a population that did not participate in the main study. The questionnaire was considered reliable since it yielded a reliability coefficient of 0.784.The study findings that majority of the women within Mathare slums believe there is limited information available about the Linda Mama programme. They also acknowledge that women in Mathare understand the dangers associated with home delivery. In the same vein, they believe perceive that registration to the programme is cumbersome. The researcher found out that women in Mathare are happy about the attitude of their healthcare service providers although quite a substantial number were unsure. However, majority of the women were not certain of their experience in their last visit with a larger number indicating a good experience. In addition, the women acknowledge their right to decision making and thus reported that experiences from their

friends and community members will not influence their decision on uptake of Linda Mama programme. From the survey, the researcher found out that majority of women in Mathare slums are satisfied with Linda Mama services including the healthcare. However, their perception on the speed and efficiency of service delivery under the programme was evenly spread with mixed reactions. Nonetheless, a majority believe the services are slow and inefficient. This probably could be the contributing to the larger number of women that are sent to purchase additional drugs and other commodities as reported by a majority of the women in Mathare slums. This research established that majority of women in Mathare slums are not decided on whether to take-up the programme or not. They however acknowledge the good health of children delivered under this programme and the fact that the programme has contributed to reduced complications during delivery. The analysed regression model showed that; Uptake of Linda Mama programme among women in informal settlements= 4.34 (Awareness of Linda Mama programme) – 0.118 (Demographic background of the beneficiaries) + 0.155 (Attitude of healthcare service providers) - 0.424 (Quality of healthcare services in the health facilities).

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Regionally, African governments are using different strategies to increase uptake of maternal healthcare delivery programmes by providing subsidies, implementing community health insurance schemes, abolishing user fees through donor funding and utilising partnerships to improve uptake of maternal healthcare delivery programmes by women. Many countries strive to make these programmes cost effective through partnerships with the private sector (WHO, 2010).

International conferences such as the Cairo conference and Beijing conference have emphasised the importance of women's reproductive and sexual rights, as well as related perceived factors that could either positively or negatively influence uptake of various maternal healthcare delivery programmes around the world. These factors could range from demographic variables such as level of education and age to workload, social stigma and political and legal issues. Moreover, donors from the international community influence the conditions set of the county's health delivery programmes to suit their own agenda. Financing mechanisms have been noted in various countries to be a way of improving perception of services offered through various maternal healthcare delivery programmes especially in informal settlements. This could be done through investigating whether affordable insurance schemes or credits can be designed for women including those living in informal settlements. These schemes will influence their uptake of maternal health care delivery programmes (Oxaal and Baden, 1996).

Maternal healthcare delivery programmes in Kenya have not been equitable to all women for many years until recently when the Linda Mama programme was initiated. In April 2017, the free maternity services policy previously funded by national government was transferred to NHIF under the name of the programme now known as Linda Mama. The first phase began with faith based and low cost private sector facilities in April. It then moved to the public sector in its second phase in July 2017 and in March 2018, Linda Mama programme introduced antenatal and post-natal care (Appleford, 2018). The Linda mama programme is meant to allow

all women to access free maternal health care delivery in public health facilities. The programme seeks to provide services on the basis of need rather than on the ability to pay. This public funded health scheme will require that all pregnant women have equal provision to quality and affordable maternal healthcare services. The services and benefits received through the programme are also portable. Mothers do not need to receive services from the same provider or from the same site every time. Appleford, (2018) estimates that the programme has contracted 502 low cost private and faith based health facilities, and approximately 4000 public sector facilities in the country as part of the scheme.

To register for the programme a client must be a pregnant woman of 18 years and above. Women can register into the program either through their mobile phones, contracted healthcare providers, NHIF service centres, Huduma centres countrywide or the NHIF registration portal using their national identification card and antenatal records. All pregnant women under the age of 18 years are registered as clients using the national I.D of their guardians and their antenatal care records. Those without national identification cards are registered using antenatal care records. Women are registered during their clinic visits for ANC, chief's meetings and church functions. Abuya, Matanda, Obare and Bellows, (2018) note that the benefits enjoyed in the programme are an expanded package that include; antenatal care package, delivery package, neonatal care package, inpatient services, and outpatient services for a period of one year.

1.2 Statement of the Problem

The Linda Mama programme is one that should see the utilisation of the expanded benefits by all clients willing to be registered in the programme. However uptake of the programme despite the barrier of cost been removed has not been as expected. The availability of the programme to the beneficiaries does not guarantee that the uptake of the maternal healthcare delivery programme will be guaranteed due to various perceived factors that could be positive or negative. Demographic characteristics such as level of education can influence understanding of the uptake of various services provided through the healthcare delivery programme. Educated women may be keen to note the expanded benefits offered through the programme (Addai, 1998).

Awareness of such programs is commonly believed to positively or negatively influence the decision making process of women to use up healthcare delivery programmes (Elmusharaf,

Bryne and O'Donovan, 2015). Lack of awareness on the importance of a certain healthcare delivery program or even their existence could influence the uptake of the healthcare delivery programme in informal settlements among women.

Pyone and Smith, (2017) reported that the attitude of healthcare service providers can also be a source of conflict between the programme and the user in the case of misaligned incentives for example increased uptake leading to increased workload for healthcare provider. They opine that there is perceived danger that many programs focus on technical skills and neglect interpersonal skills of the health providers.

Uptake of maternal healthcare delivery programmes is sometimes based on the quality of health care (Charantimath, Vilder, Ramadurg, and Qureshi, 2016). Uptake of maternal healthcare services by some women is attributed to new government programmes and increased availability of the services offered. These services are expected to provide expanded benefits to the women unlike before the programme existed. Nevertheless, some pregnant women still find themselves delaying in enrolling to maternal healthcare programmes even when it is offered free.

In view of the statements above, the study sought to carefully look into these perceived factors and how they influence the uptake of the Linda Mama healthcare delivery programme by women in Starehe Sub County.

1.3 Purpose of the study

The purpose of this study was to determine how the perceived factors influence uptake of maternal healthcare delivery programme among women in informal settlement in Starehe sub County.

1.4 Objectives of the study

The study was guided by the following objectives:

1. To establish the extent to which demographic characteristics influence uptake of Linda Mama maternal healthcare delivery programme among women in informal settlements.
2. To assess how the awareness of the program influence the uptake of Linda Mama maternal healthcare delivery programme among women in informal settlements.

3. To determine the extent to which attitude of health care service provider influence uptake of Linda Mama maternal healthcare delivery programme among women in informal settlements.
4. To examine how quality of healthcare influence uptake of Linda Mama maternal healthcare delivery programme among women in informal settlement.

1.5 Research Questions

The study sought to answer the following research questions:

1. To what extent do demographic characteristics influence uptake of Linda Mama maternal healthcare delivery programme among women in informal settlement?
2. How does awareness of the program influence the uptake of Linda Mama maternal healthcare delivery programme among women in informal settlement?
3. To what extent does the attitude of health care provider influence uptake of Linda Mama maternal healthcare delivery programme among women in informal settlement?
4. How does quality of health care influence uptake of Linda Mama maternal healthcare delivery program among women in informal settlement?

1.6 Significance of the study

The findings of this study is expected to enhance good practise among service providers in Linda Mama maternal healthcare delivery programme in Starehe Sub County. It is also expected that the findings will inform the sub county officials on uptake of the programme by women living in the sub county. Lastly, this study will form a base on which other studies can be developed.

1.7 Limitations of the study

Accessing women to participate in this study during the day in Mathare was difficult as most of them were out during the day. The researcher therefore extended the research period to target the highest number of respondents possible as per the targeted sample size. The researcher also noted that most mothers were not willing to participate in the study as they thought it was an NGO that they perceived has been exploiting them through studies involving them for the NGOs financial gain and not to help them. The researcher however reassured the respondents that the study was purely for academic purposes. To mitigate these, the research identified

influential community leaders (Chiefs, church elders) who are able to convince women that the study is for academic purposes only.

1.8 Delimitations of the study

The study was delimited to responses from women residing in Mathare slums in Starehe Sub County. Although the Linda Mama maternal healthcare programme services are offered in several healthcare facilities within Starehe Sub County, this study delimited herself healthcare providers at Pumwani Maternity Hospital. This is the largest tertiary healthcare facility in Starehe Sub County to study the perceived factors influencing uptake of maternal healthcare delivery programme among women in informal settlements.

1.9 Assumptions of the study

Assumptions of the researcher that all respondents would cooperate in filling out the questionnaire and provide accurate and honest answers to the questions, came true as 99.7% of the questionnaires were filled up and submitted. In addition, all respondents participated willingly and freely since the researcher sought their informed consent before collecting any information from the respondents**.**

1.10 Definition of Significant terms used in the study

Demographic characteristics-Demographic characteristics are those personal characteristics the women have that their influence uptake of maternal healthcare delivery programme and include age of the mother, her level of education and marital status.

Awareness of the programme-Awareness of the programme refers to women's knowledge or lack of knowledge about the existence of the Linda Mama programme. It also refers to the information available to these women on the services or benefits received through the programme. Awareness of the program can also be seen through how many women are actually utilising the service. Awareness of the program could also mean whether these women know the benefits or risks that are there if they do not use the services provided through the programme.

Attitude of healthcare service provider-Attitude of health care provider refers to the inter personnel skills the healthcare provider has towards the service user. It focuses less on their technical skills but rather on the personnel behaviour while handling the service provider. The

attitude of the healthcare provider can also be explained through the personal experiences of the service user while receiving the service or past experiences of friends who have received the services offered by the Linda Mama programme.

Quality of healthcare-Quality of healthcare describes the level of satisfaction by the women who use the services offered by the Linda Mama. It also means how they received the services in terms of timeliness and waiting period. If they were attended to punctually and received, felt the programme had a variety of specialisation of cadres attending to them.

Uptake of Linda Mama maternal healthcare delivery program-Uptake of maternal healthcare delivery programme means mothers are registered into the programme and are enjoying the services or benefits that are offered in the programme. In this case the women are registered and are utilising the benefits offered through the Linda Mama programme. Uptake can also mean the mothers attended in the programme and healthy mothers and babies born as a result of utilising services offered by the programme

1.11 Organisation of the study.

The study was organised into five chapters. The first chapter introduced the topic, the research problem, the purpose of the study, research objectives and questions guiding the study and limitations as well delimitations of the study.

The second chapter analysed literature on demographic characteristics and uptake of maternal healthcare delivery programme among women in informal settlements. The chapter also reviewed literature on awareness of the programme and uptake of maternal healthcare delivery programme among women in informal settlements. It also reviewed studies on the attitude of health care provider and uptake of maternal healthcare delivery programme among women in informal settlements. Lastly, the chapter reviewed literature on quality of healthcare and uptake of maternal healthcare delivery programme in informal settlement. The second chapter provided a conceptual framework outlining the relationship between variables under study. An assessment of knowledge gaps based on literature review is tabled.

The third chapter described the methodology for research as well as the selection of the target population, sampling, sample size and instruments for data collection. The chapter also

described how the reliability and validity of the research instruments was determined as well as procedures for collecting and analysing data.

Chapter four presented the response rate, reliability of research instrument, data analysis and presentation. The findings were presented in tables, narratives and charts. The fifth chapter outlined the summary, conclusions, and recommendations of the data findings and suggests area for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews various studies done related to the variables under investigation. It focuses on perceived factors influencing uptake of maternal healthcare delivery programme among women in informal settlements. It also presents the conceptual framework on which the research was based on.

2.2 Uptake of maternal healthcare delivery programmes among women in informal settlement

Initiatives by the government to increase access to quality maternal healthcare delivery programmes to benefit women and their babies is limited to public health facilities which in most cases are not within reach or few within slums. (Osindo, Bakibinga, Remare, Ziraba and Ngomi, 2014). Many policies against poverty in developing countries such as Kenya are also extremely vulnerable in a general climate of corruption (University of Geneva and National University of Singapore, 2018). Moreover, great emphasis is put on uptake of maternal healthcare delivery services and little is said about a mother's choice of the healthcare provider in the developing world. More knowledge on how mothers or significant persons in families decide on their health provider is key in understanding the issue of equitable access in urban informal areas (Alcock, *et al.*, Sept 2015).

Women dwelling in urban informal settlements are from different backgrounds, as are their current environmental conditions. They reside in homes with poor access to clean water and sanitation facilities, insecure neighbourhoods, poor quality homes and congestion. Interventions to improve health should be equity-driven and target those at higher risk, including the implementing maternal healthcare delivery programme (Osrin, *et al.*, 2011). Yesudian, (1988) suggested that unlike the poor in the rural, the poor dwelling in the urban areas equally have many health services available to them in the city. These services could be ordinary dispensary services to tertiary level teaching hospitals. It is also suggested that the less privileged in the urban dwellings have lower uptake of delivery programmes than the aggregate urban population (Farah, Matthews and Griffiths, 1999).

Without medical cover, most mothers residing in urban informal settlements paying for costs incurred during delivery is a great challenge for most even despite government hospital charging very modest fees. Thus, many of these women end up having home delivery with the assistance of people who are in most cases not experienced and most die when emergency situations occur. Various ways to overcome the obstacle of finance for women in need of maternal health care delivery programmes are ongoing in Kenya. A good example of a very successful scheme is known as the Output Based Approach (OBA), that sells vouchers to women for $2.50. The vouchers will cover these women's' cost of delivery as well as pre and postnatal check-ups. This donor funded maternal healthcare delivery programme was piloted in four districts including Kisumu, Kitui, Kiambu and Nairobi in the Korogocho and Viwandani slums (Anyangu, 2018). On the demand side, the vouchers reduced financial burden for women seeking maternal health care delivery services through the highly subsidised vouchers. On supply, the voucher programme sought to increase uptake by increasing provider choice as well as quality by enrolling in both private and public health facilities (Abuya, *et al.*, 2018).

The transfer of maternal health care delivery services to NHIF, and potentially change to a health insurance in future is in line with promoting equity of the benefits to women in informal settlements. Potential change to health insurance in future is possible with the current policy framework (Njuguna, Kamau, and Muruka, 2017). Few studies have been done to assess uptake of maternal health care delivery programme among women in informal settlements under the free maternity services (FMS) with varying results. It is through these studies that the idea to consolidate the free maternity policy with the existing pre-paid system in 2016 by transferring free maternity services to NHIF under the new expanded maternal delivery programme popularly known as Linda Mama was proposed.

2.3 Demographic characteristics and uptake of maternal healthcare delivery programmes among women in informal settlements.

A mother's highest attained education level has been seen to be positively associated with the utilization of maternity care services (Addai, 1998). Seeking proper health care is more likely, with educated mothers; as seen in the 2007 Millennium Development Goals Report, "84 per cent of women who have completed secondary or higher education are attended to by skilled personnel during childbirth. This is double the rate or women with no formal education. Little

and low level of education, inadequate exposure through the media, poverty, few antenatal clinic visits among women easily led to the acceptance of home delivery. Women who are more educated may understand the need for enrollment into a maternal health care delivery programme. Besides this, women with formal education may also have a greater decision making power on registering for delivery services and have the ability to decide to travel outside home. Husbands who are equally educated also may be more aware of the benefits of healthcare programs and are more able to seek it. Their minds may also be more flexible towards their wives decisions, thus facilitating delivery care seeking behavior (Chowdry, *et al.*, 2013). It is recognised that education of the mother has a dir;ect bearing on the ability of the mother to take up a healthcare delivery programme (Concern World wide, 2007)

The effect of a mother's level of education is seen in many ways, including improving her ability to produce good maternal health outcomes without even relying on health services by influencing her reproductive behaviours (Ahmed, Creanga, Gillespie and Tsul, 2010). These include contraceptive use, increasing women's use of maternity care services through improved knowledge, attitude and practice, empowering her to be able to leverage decision-making power regarding reproductive choices and access to birth services within the household and community. Women who are older and with many children have greater responsibilities within the homestead including childcare and these could be effected to explain why their tendency to use facility delivery services is less frequent (Kwast and Liff, 1998). Women in polygamous marriages are less likely to enrol in any maternal health delivery programme than those in monogamous unions (Niane, Ibrahim, Faye and Adama, 2011).

Involvement of husbands in uptake of maternal healthcare delivery programmes in informal settlements is crucial. Most men hardly provide the support needed by their spouses while she is expecting, more so if they themselves didn't intend to have another child, or the couple has other children (Tuyisenge, *et al.*, 2018). Contrary to expectation, in another study it was found that utilisation of maternal care delivery programmes by adolescent mothers country is an inequality issue. More focus need to be put on the poorest and less educated teenage mothers living in the most disadvantaged communities (Oluwasola, Aduragbemi, and Ameh, 2016). Equally, even age specific health education programs improve uptake of maternal health care delivery programmes in informal settlements (Olusanya, Alakija, and Inem, 2009).

2.4 Awareness of the programme and uptake of maternal healthcare delivery programme among women in informal settlements

The uptake of maternal health delivery services by slum dwellers may not necessarily be pegged on the quality of the health services but also awareness of existence of the programs (Jean, Christophe, Ezeh and Oronje, 2008). Moreover, these women need to know the need of them registering or enrolling to any maternal healthcare programme. They also need to understand the consequences that might arise from them not been registered in a maternal health care delivery programme (Jean, *et al.*, 2008). Behaviour change for women in informal settlements can be fostered through health education (Kemm, 2003). Most women from informal settlements who attend the clinics or other services offered through the programme are casual labourers or are in other informal employment arrangements. Their lack of understanding of opportunity cost may be a hindrance to uptake of the maternal health care delivery programme. Some employers can allow the women to take time off needed to enrol for the clinic and attend the required clinics, provided they can demonstrate attendance, but this is mentioned as rare in many cases (Kemm, 2003). Some women also see identification process of the user as cumbersome.

Channelling of health messages through a mixture of avenues such as community radios, community meetings, outreach activities, posters and leaflets could enable a wider reach and continued uptake of maternal healthcare delivery programmes for women living in informal settlements (Chuma and Maina, 2013). The lack of community outreach programmes has a significant bearing on uptake of maternal health care delivery programmes. Word of mouth however does play a role in uptake of maternal health care delivery programmes by women in informal settlements when the woman has a virtuous reputation. In other cases the women are considered by the community as not been service oriented (Concern World wide, 2007). Community engagement and sensitisation are powerful ways of creating health awareness on the risks and benefits of the maternal health care delivery programme. Awareness of the programme among women in informal settlements needs to be considered as they form a larger part of the population and it is for this reason they should be the first target. Registration and recording of women into the programme should be more aggressive unlike currently where NHIF mostly reaches people in the formal sector.

Planners of health care delivery programmes need to know the power of reliable reproductive health information while rolling out maternal health care delivery programmes (Twaha, Faxelid, Mirembe, and Weiderpass, 2007). In addition, the perception of women on these delivery programmes matters, affects, and are critical in the fight towards sustainability in maternal healthcare programmes. Responding to their views could help fostering behaviour change. A relationship exists between source of information and the uptake of maternal health care delivery programmes (Essendi, Mills and Fotso, 2010).

2.5 Attitude of healthcare service providers and uptake of maternal healthcare delivery programme among women in informal settlements

Healthcare providers in most countries in sub Saharan Africa are few for many reasons such as international immigration, retirement prematurely, career changes and lack of in service training leading to shortages and overworking of the few in maternal healthcare delivery programmes. This affects the attitude of the few healthcare providers left because of burnouts Kinfu,(2009). Health care providers have had varied thoughts in regard to the uptake of maternal healthcare delivery programmes through the managed fund approach under NHIF. Healthcare providers feel in principle uptake under the transfer will be good for the new programme. However, they also feel that the process should be anchored within the law that governs financial processes under the devolved structures of government (Abuya, Matanda, Obare, and Bellows, 2018).

Staff motivation, increasing number of skilled personnel and retention would help ensure improved attitude of healthcare provider in the maternal healthcare delivery programmes by reducing staff burnouts (Fikre, 2016). There is a perception by healthcare providers that that uptake of maternal healthcare delivery programmes and the decision to use the benefits in a particular facility is based on the reputation of the facility. 'Erratic' uptake as well as in and out migration patterns within informal settlements create challenge for follow up after delivery as well as health service organisation (Concern World wide, 2007).

Some health care providers are sceptic about the Linda Mama maternal healthcare programme in regards to efficiency of NHIF due to linked late reimbursements and general distrust by public institutions. The health workers feel this will affect uptake in later days (Abuya, Matanda, Obare, and Bellows, 2018). Healthcare providers also are not sure if the programme

will be able to reach all women especially in informal settlements. Some healthcare providers feel low levels of awareness about the programme without adequate sensitisation in the community will affect uptake of the programme. Some healthcare providers feel that although many women in the informal settlement will gladly enrol while some will adopt a wait and see attitude (Chuma, *et al.*, 2013).

Discrimination by certain healthcare providers has led to a perception of or actual cultural insensitivity, resulting in a lack of trust in services and service providers. Trust in maternal healthcare delivery programmes is crested within the notion of societal trust (Sripad, Ozawa, Warren, and Merritt, 2017). Negative attitudes of health care providers may discourage the use of services by the users, and negative attitudes may foster low expectations among women using the Linda Mama programme (MoH, 2015). The attitude of healthcare providers can be one reason women choose to enrol in maternal health care delivery programmes. The presence of friendly and motivated staff is a reason why women choose to take up services offered in a programme. However, while some health care providers offer good services others are feel to be dismissive or abusive.

2.6 Quality of healthcare and uptake of maternal health care delivery programme among women in informal settlement

Quality of healthcare can be achieved by enhancing respect and dignity (Warren, Ndwiga, Wriiter, and Abuya, 2017). Inequality is also detrimental in implementing a free maternal healthcare delivery programme in informal settlements. The so called urban advantaged that mothers and their babies need to have access to care, especially around the time of birth is non-existent for the urban poor in some cases (Mathews, *et al.*, 2010). Many women may never return to the health facility if their expectations of quality care are not achieved. This is also demonstrating that poor satisfaction by women on maternal healthcare delivery programmes has a direct relationship with the uptake of the delivery services (Mutuku and Githae, 2018). Handling of complications arising during delivery in both public and private facilities is poor in Nairobi slums (Otundo, Wangombe, Muchiri, Chimbevo, and Ooga, 2017). Moreover most private facilities in the slums remain illegal, not regulated and unregistered. Services offered through the expanded free maternal health programme are free although some informal payments needed by the mother are not mentioned.

The Linda Mama programme has attracted several women into health facilities offering the services. These facilities have clinic that operate for a few hours in a day leading to lengthy queues and long waiting time before women are attended to. If a woman requires multiple services, there is a separate queue for each service compounding the waiting time (Taylor, Semarau, Gawandu and Patna, 2015). Quality of the maternal healthcare delivery programme though free is conditioned on the perceived expectations of the clients (Concern Worldwide, 2007). The programme offers a range of services that can be adjusted as needed over time. Suggestions have been made by some women that the quality of the programme could impove if additional incentives such as soap, cotton wool and sanitary pads were offered (Chuma, *et al.*, 2013).

It is reported staffing inadequacies in health facilities especially for specialized cadres (gynaecologist, paediatricians) being the most affected, followed by the medical doctors and mid-level cadres (clinical officers, nurses) has been a major challenge in the implementation of the Linda Mama programme. Personnel are required to work in various departments at once whenever on duty especially in the lower level facilities. A measure of quality is among others clients' satisfaction and this increases confidence of women in a health facility and affects the utilization of the same health care delivery service. The strengths and weaknesses of a maternal health care delivery programme are generally measured by patients' satisfaction or their dissatisfaction with the services (Al-Doghaither, Abdelrhman, and Wahid Saeed, 2000).

Kenya like many other African countries is experiencing pitfalls in lack of adequate human resource and this has been a major barrier in improving delivery of the expanded benefits through the Linda Mama program (Jomo and Osuga, 2006). It was also found that the implementation Linda Mama programme in the country was associated with poor hygiene and low privacy and many women remained unsatisfied with the health services given despite them being free. It was recommended that if more was done to address service gaps and improve on quality more mothers would be attracted to deliver in public health facilities (Mwanda, Gichangi, and Gitobu, 2017). There has also been mention of lack of integration of services offered through the programme by health care providers and this has had an effect on the perception of the quality of services offered through the maternal health care delivery programme by women. Ironically, stock outs of commodities in some cases encourages better communication between mothers and health care providers to fill the commodity gap with

promotive and preventive measures (Concern World wide, 2007). Quality of the maternal health care delivery programme, Linda Mama for some women is not good, as many women have noted that referrals and complications are not well compensated (Abuya, *et al.*, 2018).

While reviewing client satisfaction it was found that most mothers are happy with quality of maternal health care delivery program in the county and are willing to recommend the services to others whether in the public or private facilities. This could mean that despite challenges in quality of services overall, the programme offers good services to clients. These results disputed with those in a study conducted in Kenya by Bazant & Koenig (2009) which found that many women living in urban informal settlements who gave birth in public health facilities using the programme were dissatisfied.

2.7 Theoretical framework

The health belief model guided this research. The model was developed By Irwin M Rosen, Godfey in the 1950s to better understand why the free screening programs for tuberculosis were failing. It was used to better predict people's attitudes towards an intervention. The model has theoretical constructs. There are a number of theoretical constructs in the model. The first construct is perceived threat. Perceived threat includes perceived susceptibility and perceived threat. This refers to the individual perception of them getting the disease. If they feel the disease or condition majorly is for the elderly then they will be less likely to take any measures to protect themselves from the disease or condition. Perceived severity on the other hand is the idea one thinks they are less likely of getting the condition due to low risk. The most feared perceived severity would be disability or death. Persons of higher risk are more likely to engage in the preventive measures required for the condition. Perceived Barriers is the other construct. These are an individual's perceptions of difficulties they would face in taking up an action for example physical barriers or financial support. Perceived benefits is the third construct. If a person believes that a certain action will reduce susceptibility to a certain health condition then he or she will take up measures to reduce the susceptibility to that health condition or its seriousness. An example is if a woman believes that by delivering in a hospital she will be reduce her chances of complications then she will do so.

The other construct is self-efficacy. This is the person's belief to take up a given action. The individual should believe they are able to do a certain action. Their belief to do the action will

enable them to do or not to do it. If they think they are unable to do the action then they might find it challenging irrespective of how essential it might be to them. The fourth construct is the modifying variables. These are individual characteristics such as age, race education, ethnicity, social class, peer group among many others. The other construct would be cues to action and these are the prompts that are needed to move a person to take up a particular health action such as marked calendars and email reminders (Health Belief model, 2018).

2.8 Conceptual framework

The conceptual framework 1.1 shows the logical relationship between dependent variable, independent variable and the moderating variable for the study. The independent variable refer to the variables that can be used to assess the uptake of the Linda Mama programme among women in informal settlements in Starehe Sub County. The independent variables for the research study are demographic characteristics, awareness of the programme, attitude of health care provider and quality of health care. The dependent variable is influenced by number of women seeking services through the program, number of new health mothers and babies born, user acceptance and safe deliveries.

The study is guided by the following conceptual framework;

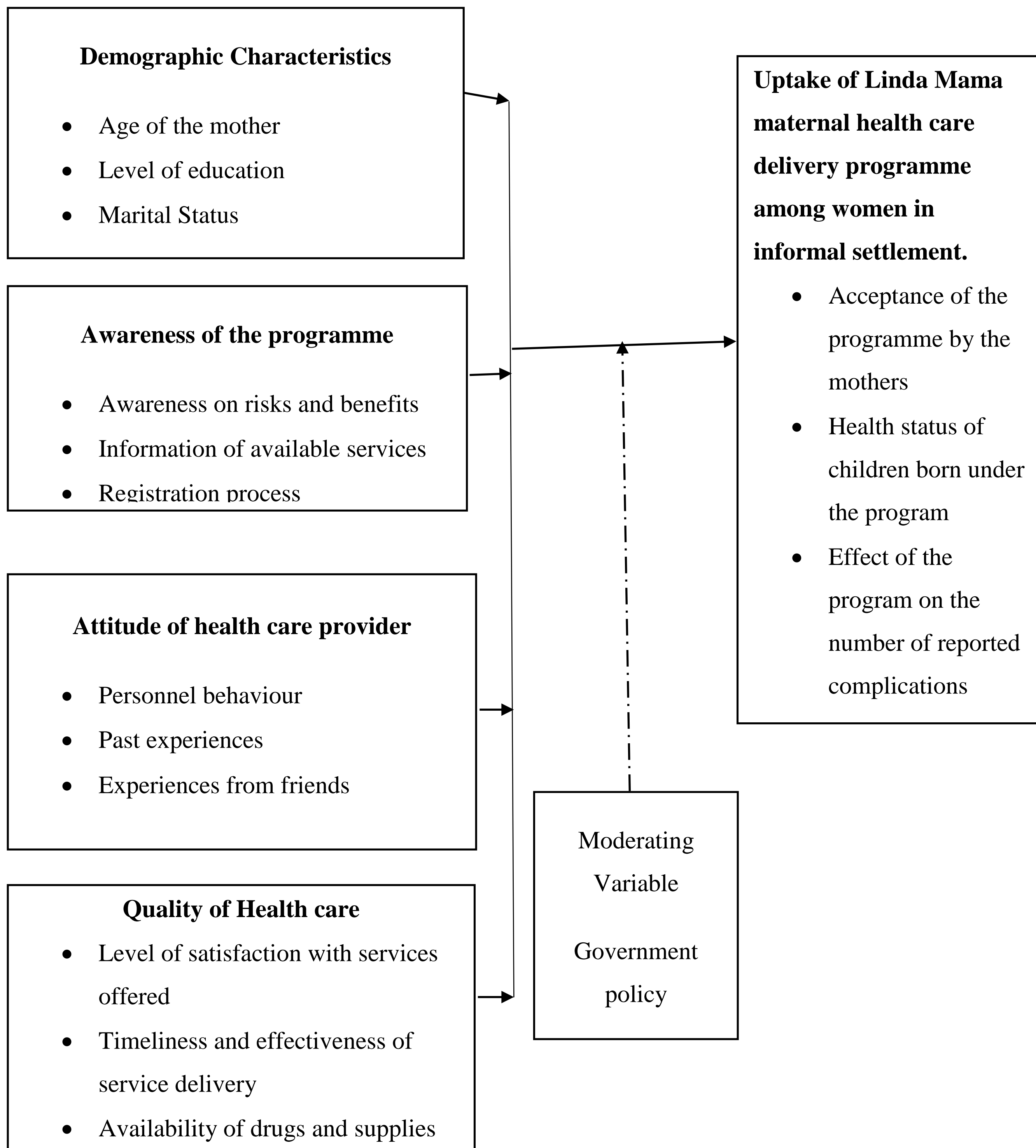

Figure 1 Conceptual Framework of perceived factors influencing uptake of maternal health care delivery programme.

2.9 Knowledge gaps

Table 2.1 Knowledge gaps

Variable	Author	Title of the study	Findings	Knowledge gap	Focus Of current study
uptake of maternal health care delivery programme among women living in informal settlements	Okang C, Kasege Dan. (2015	The Pull and Push Factors Influencing Choice of Place and Delivery Attendant in the Urban Slums of Nyalenda, Kisumu East District, Kenya	The study found that inadequate supplies and other indirect fees such as transport charges, lack of quality care and cultural merge to include consideration of the age gap between users and service providers were among the factors pushing women away from uptake of skilled attendance. Need for access to emergency services in the case of complications and level of how comprehensive the care given at the health facility were some of the pull factors influencing uptake of skilled delivery	The study was delimited to an urban informal settlement in Kisumu East.	This study sought to add information in urban settlements in Starehe sub county, Nairobi County

	Farquhar C,Wanzala P,Nganga Z,Kimani H (2015)	Determinants of Delivery by Skilled Birth Attendants among Pregnant Women in Makueni County, Kenya	The study established that parity, transport availability and education level were independently associated with mothers not utilising skilled care during delivery. Uptake of skilled delivery by skilled birth attendants could increase by targeting interventions on these factors in the country and other parts of sub Saharan Africa.	The study was delimited to Makueni county	This study was conducted in Mathare, Starehe sub county.
Demographic charactersitics	Leila Geteri,Careena Flora Atieno,Ronnie Midigo,Asha Adan Farah (2016)	Demographic and economic factors associated with uptake of skilled delivery services among women of reproductive age in Mandera county, Kenya	The study found out that significant predictive factors for the use of skilled assistance at delivery include maternal age, education, religion, number of past deliveries and household head.	The study was delimited to the central division of Mandera east Sub County	The focus of this study in terms of scope was Starehe sub county

	Nzioki J,Onyango R,Ombaka J (2015)	Socio-Demographic Factors Influencing Maternal and Child Health Service Utilization in Mwingi	The study found that a woman's level education, her age, daily and monthly household income, occupation and parity are among the main socio demographic factors which influence utilisation of health facility services in Mwingi district.	The study was delimited to the rural set up	The focus of this study is to add more information in an urban set up
Awareness of the programme	Abuya, Obare, Matanda and Bellows (2018)	Stakeholder perspectives regarding transfer of free maternity services to National Health Insurance Fund in Kenya: Implications for universal health coverage	Transitioning FMS to NHIF provides an opportu- nity for the Ministry of Health to sharpen its role as policymaker and develop a comprehensive health care financing strategy	The study was delimited to Kisumu, kitui, kiambu, Makueni, nyandarau and uasin gishu counties	The study provides insight in starehe sub county.
Attitude of health care provider	Abuya, Warren C, Ndwiga C, Ritter J.	Exploring provider perspectives on respectful maternity	The study established that implementation of a rights based approach to maternity care can be challenged by the translation of the health	The study was delimited to 13	The study focuses on both facility manager ,county

	(2017)	care in Kenya: "Work with what you have	provider's positive attitudes and behaviours. Women's care can be affected by mistreatment due to the providers' emotional health.	health facilities in Kenya.	level manager and women in informal settlements
Quality of health care	Nyongesa M, Onyango R, Kakai R. (2014)	Determinants of clients' satisfaction with healthcare services at Pumwani Maternity Hospital in Nairobi -Kenya	The study established that waiting time for patients, drug availability, and service affordability level of staffing, level of cleanliness were the factors identified to determine patient satisfaction.	The study was delimited to Pumwani Maternity in Nairobi.	The study hoped to add more on quality of maternal health care delivery programme among women in informal settlements in Starehe sub county

2.10 Summary of Literature Review

The literature review discussed different literature on various perceived factors influencing uptake of maternal health care delivery programme. These studies discussed uptake of maternal health care delivery programmes from the view of researchers in urban informal settlements in other countries such as India, Uganda, Nigeria, Burkina Faso and Ghana. Few studies have addressed this issue locally. Many studies were also largely concerned with the rural poor than the urban poor while evaluating the perceived factors influencing uptake of maternal health care delivery programmes. Some studies have also documented the perspective of uptake of the maternal health care delivery programme through the view of the facility level managers and sub county officials as stakeholders in the programme, few studies have looked at perceived factors influencing uptake of the health care delivery programme through the view of the women.

In essence, limited literature has discussed the perceived factors influencing uptake of maternal health care delivery programmes among women in informal settlements in a context where the programme has removed the crucial barrier of cost.

This study sought to fill the research gap by showing the perceived factors influencing uptake of Linda mama programme among women in informal settlements.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a detailed description of the research methodology the present study adopted. Methodology is the detailed procedure used to answer the research questions. It includes a description of research design, sampling techniques, instrumentation and data analysis techniques. It describes in detail what was done and how it was done.

3.2 Research Design

According to Mugenda, (2003), research design is the scheme, outline or plan that is used to generate answers to research problems. This study adopted a mix of exploratory and descriptive survey research design. A descriptive design entails precise measurements and the reporting of the distinctiveness of elements of a certain phenomenon that is being investigated under research, and offers descriptions of phenomena, events and situations (Best & Kahn 2007). It was explanatory in the sense that the problem was examined with an aim of establishing the causal relationships between variables. On the other hand, it qualified as descriptive since it sought to portray the phenomenon through describing events, situations and processes.

3.3 Target Population

Population refers to an entire group of persons or elements that have at least one thing in common, for instance the doctors, nurses and clinical officers working maternal health care delivery programme in Pumwani Maternity Hospital and women of reproductive age living in Mathare slums. Target populations involve the larger population to which the researcher ultimately would like to generalize the result of the study (Kothari, 2005). The population under this study entailed 80,309 (44,098 males) and (36, 620 females) living in Mathare slums as per 2009 Household Population Census and 433 medical practitioners in Pumwani Maternity Hospital as indicated in the table below.

Table 3.1 Target Population

Population Strata	Target Population
Women	36,620
Doctors	23
Clinical Officers	10
Nurses	400
Total	**37,053**

Source: 2009 population census and Pumwani Maternity Hospital staff list

3.4 Sample size and sampling procedure

This section describes how the sample size of the study was arrived at and the sampling procedure used to select the sample size for the study.

3.4.1 Sample Size

According to Cooper and Schindler (2008), a data sample is a set of data collected and/or selected from a statistical population by a defined procedure. The sample usually represents a subset of manageable size. Samples were collected and statistics were calculated from the samples so that one could make inferences or extrapolations from the sample to the population. To calculate the sample size, we referred to Yamane's formula for finding the sample size (Yamane, 1967) as indicated below.

$$n = N/(1+N(e^2))$$

Where:

n- Is the sample size

N- Size of population

e- Acceptable sample error

By applying the Yamane's formula of sample size, with a confidence coefficient of 95% at an error of 5%, the calculation from a target population of 37053, the calculation was as given:

$n = 37053/(1+37053(0.05^2)) = 396$

Therefore, the sample size=396 respondents. The study used stratified sampling technique from the identified study sample size of population.

3.4.2 Sampling Procedure

This study employed a proportionate random sampling to determine the sample size for each group of the respondents and to ensure that the sample is representative of the entire commission. The desired sample size was 396. To establish the sample size per group, the population for each group was multiplied by a statistically relevant percentage as indicated in the table below. A sample from each group was obtained by using simple random and purposive sampling methods to pick respondents from each area. Krejci, *et al*., (1970) indicates that the larger the sample the smaller the magnitude of sampling error and the greater the likelihood that the sample is representative of the population.

Table 3.2 Sample Distribution

Population Strata	Total population	Proportionate sample
Women	36,620	391
Doctors	23	1
Clinical Officers	10	1
Nurses	400	3
Total	**37,053**	**396**

3.5 Data Collection Instruments

The researcher used questionnaires to collect primary data. Questionnaires are commonly used to obtain important information about the population. According to Mugenda (2003), a questionnaire is the only way to elicit self-reports on people's opinion, attitudes, beliefs and values using google forms.

The questionnaire had items aiming at answering the study questions and it meets the research objectives. Questionnaires were preferred for this study since it was thought that they would provide a high degree of data standardization and adoption of generalized information amongst the population. Structured questionnaire were used to collect data. The closed ended questions were used for easy coding and analysis while the open ended questions were used to elicit more

information from respondents to complete any missing links. The closed ended questions were accompanied by a list of possible alternatives ranging on a five point Likert scale ranging from strongly agree(1) to strongly disagree(5), from which respondents were required to select the answer that best describes their situation.

3.5.1 Pilot testing of the Research Instrument

A pilot study was carried out to pre-test and validate the questionnaire. Cronbach's alpha methodology, which is based on internal consistency, was calculated. The calculation yielded a reliability index of 0.875. This was above the recommended 0.87 index indicating the questionnaire is reliable for producing stable and consistent results as indicated by (Kothari, 2004).

3.5.2 Validity of the Instrument

Cozby (2001) explains that validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. The researcher used the pilot to ensure content and construct validity of the research instruments. Content validity which refers to how much an instrument fully assesses the relationships between globalization and project management. Construct validity on the other hand is the amount the instrument actually tapped into the theoretical concept it was supposed to assess.

3.5.3 Reliability of the Instrument

Mugenda and Mugenda (2003) define reliability as a measure to which a research instrument yields consistent results or data after repeated trials. The pre-testing of instrument was conducted to ensure that it is reliable for collecting data required by the researcher. The test-retest technique was used to determine the reliability index of the questionnaire. A time lapse of two weeks was given between the first and the second test. The scores from the testing periods were correlated using Pearson product-moment correlation. The questionnaire was considered reliable since the calculated a reliability coefficient was 0.875.

3.6 Data Collection Procedures

A permit to conduct the research was obtained from the National Commission for Science, Technology and Innovation (NACOSTI) before the data collection process commenced. This was after the approval from the university to carry out the research.

The study also made use of secondary data that will be from published articles, reports and papers relating to perceived factors influencing uptake of Linda Mama programme among women in informal settlements.

The questionnaires were administered to the women with the help of two trained research assistants. The researcher conducted key informant interviews with the medical personnel.

3.7 Data Analysis Techniques

Analysis of data is a process of examining, inspecting, interpreting the meaning of the collected, organized, and visualized in the tables, charts, graphs, or other representation with the goal of discovering useful information, suggesting conclusions, and supporting decision-making. Data analysis involves looking for patterns, similarities, disparities, trends, and other relationships and finding out what these patterns might mean (Cooper & Schindler, 2003).

The data obtained for this research was analyzed using the Statistical Package for Social Science (SPSS version 20.0) and excel. The analyzed data is presented in tables, bar graphs as well as narratives.

In addition, a regression model was applied to determine the relative importance of each of the variables with respect to the uptake of maternal healthcare delivery programmes by women in informal settlements

The regression model used was as follows:

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$

Where:

Y = Uptake of maternal healthcare delivery programmes by women in informal settlements

$\beta 0$ = Constant Term

$\beta 1$= Beta coefficients

X1= Demographic background of the women in Mathare slums

X2= Awareness of the programmes

X3= Attitude of healthcare service providers

X4 = Quality of healthcare

ε = error term (residual term that includes the net effect of other factors not in the model and measurement errors in the dependent and independent variables).

3.8 Ethical Considerations

Data collection is a sensitive issue as it borders on invading people's private lives, ethical consideration are therefore of paramount importance in research (China and Oteng'i, 2007). The researcher required clearance from the Ministry of education for the researcher collect the data. The researcher therefore, got consent from all the relevant authorities (University of Nairobi, Ministry of Education and Pumwani Maternity Hospital). The researcher sought informed consent from the respondents before collecting any information from them and also assured the respondents that the information collected was intended for academic use and will be treated as such.

3.9 Operationalization of the variables

An operational definition talks about how the variables are measured and defined in the study. According to Mugenda and Mugenda, (2003) a variable is an empirical property that can take two or more values. In this study the depedent variable was uptake of maternal health care delivery programme among women in informal settlements and the independent variable was perceived factors. The perceived factors are demographic characteristics,awareness of the programme,attitude of health care provider and quality of healthcare.

Table 3.3 Operationalization of Variables

Objective	Variable	Indicator(s)	Measurement	Measurement Scale	Data analysis Techniques	Tool of Analysis	
Uptake of maternal health care delivery programme among women in informal settlements	Uptake of maternal health care delivery programme among women in informal settlements	• No. of healthy mothers and babies • No of referrals • User acceptance	• Healthy mothers and babies born. • No of women attended to in numbers • No or registered women in numbers	Discrete Discrete Nominal	Descriptive	SPSS	
Demographic characteristics and uptake of maternal health care delivery programme among women in informal settlements	Independent demographic characteristics	• Age of the mother • Level of education • Marital status	• Age group • Level of education • Marital status of woman	Ordinal Ordinal Nominal	Descriptive	SPSS	

Awareness of the programme and uptake of maternal health care delivery programme among women in informal settlements	Independent awareness of the programme	• Awareness on risks and benefits • Information on available services • No of referrals	• Knowledge about risks and benefits • No of visits expressed in numbers • No of women in numbers	Nominal Discrete Discrete	Descriptive	SPSS	
Attitude of health care provider and uptake of maternal health care delivery programme among women in informal settlements.	Independent attitude of health care provider	• Personnel behaviour • Skills of personnel • Past experiences • Experiences from friends	• Perception of behaviour of personnel • Perception of satisfaction of services from the past and friends	Nominal Nominal	Descriptive	SPSS	
Quality of health care and uptake of maternal health	Independent quality of healthcare	• Adequacy of staffing	• Perception of personnel	Nominal Nominal Nominal	Descriptive	SPSS	

care delivery programme among women in informal settlements.		• Level of satisfaction with services offered • Timeliness and punctuality	attended to from different cadres • Perception of own satisfaction with services • Perception of Timeliness when attended to.				

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the response rate, reliability of research instrument, data analysis and presentation. The findings are presented in tables, narratives and charts.

4.2 Questionnaire Response rate

According to Mugenda and Mugenda (2003) regarding a good response rate as it states a response of 50% was suitable for reporting as well as analysis.

Table 4.1 Response rate

	Questionnaires administered	Questionnaires filled and returned	Percent
	376	375	99.73%
Total	376	375	99.73%

375 dully-filled questionnaires were returned after rolling out 376 questionnaires indicating a 99.73% response rate. The high response rate was achieved as a result of support from the local leadership including chiefs, church elders that helped in mobilizing respondents to agree to participate in this study.

4.3 Reliability of Research Instruments

In order to ascertain if the questionnaires could produce stable and consistent results, the researcher calculated Cronbach’s alpha from the collected data. The calculation yielded a reliability index of 0.875. This was above the recommended 0.87 index indicating the questionnaire is reliable for producing stable and consistent results (Mugenda, 2003).

4.4 Demographic information of the respondents

The study targeted women of reproductive age in Mathare slums. This section sought to focus on the demographic information of the respondents including age, highest level of education attained and marital status.

4.4.1 Age of the respondents

The researcher wanted to find out the age group of the respondents. The respondents selected their appropriate age group

Table 4.2 Age of the Respondents

	Frequency	Percent
18-29 years	19	5.1
30 – 39 years	221	58.9
40 – 49 yeas	126	33.6
50 years and above	9	2.4
Total	375	100.0

Table 4.2 above indicates that there were 221 women aged between 30 and 39 years representing 58.9% of the total respondents. Another 126 respondents representing 33.6% aged between 40 and 49 years. In addition, 19 respondents indicating 5.1% were aged 18 and 29 years and the remaining 9 at 2.4% aged 50 years and above. These findings show that the sampling procedure adopted in the field by the data collectors reached the targeted population. The spread also indicates that the sample was homogeneous and representative of all reproductive ages for women.

4.4.2 Distribution of respondents by the highest level of education attained.

The respondents were required to indicate their highest level of education attained. This information was important since it established the capability of the respondents to respond to the questionnaire and how reliable the information would be. Their responses were as shown in table 4.3

Table 4.3 Highest level of education attained of the respondents

	Frequency	Percent
Diploma	112	29.9
Degree	123	32.8
Post Graduate	140	37.3
Total	375	100.0

Table 4.3 indicate that 140 respondents at 37.3% held at most achieved a postgraduate degree while 123 representing 32.8% had at most a bachelor's degree. The other 112 at 29.9% had achieved a diploma's level of education. This indicates that respondents were well educated enough being that they live in the city although in the informal settlements. This level of education show that the women were well versed with the subject under investigation and could articulate the issues influencing uptake of Linda Mama programme coherently. This in addition would help the researcher in establishing how their level of education was influencing their uptake of the Linda Mama program.

4.4.3 Marital status of the Respondents

The researcher wanted to know the marital status of the respondents. Their responses were shown in the table 4.4

Table 4.4 Marital status of the respondents

	Frequency	Percent
Single	203	54.1
Married	144	38.4
Widowed	20	5.3
Divorced	8	2.1
Total	375	100.0

Table 4.4 shows two hundred and three respondents representing 54.1% were single mothers while 144 at 38.4% were married. Another 20 respondents reported that they were widows and 8 of the respondents representing 2.1% were divorced. These findings indicate that single motherhood is highly prevalent in Mathare slums. Nonetheless, these findings show that the respondents had at least experienced labour and most probably have landed in Linda Mama program at some point.

4.5 Awareness of Linda Mama Programme

The researcher sought to establish if the respondents were aware of existence of the Linda mama program. To establish this, the researcher sought the views of the respondents with

regards to information shared about the program, awareness of dangers related to home delivery, awareness of the registration procedures to the program. Below are the findings.

4.5.1 Information about services through the Linda Mama Programme is limited

The researcher sought to establish if the respondents were aware of existence of the Linda mama program. To establish this, the researcher sought the views of the respondents with regards to information shared about the program, awareness of dangers related to home delivery, awareness of the registration procedures to the program. Below are the findings

Table 4.5 Information about services through the Linda Mama Programme is limited

	Frequency	Percent
Strongly disagree	67	17.9
Disagree	58	15.5
Neutral	65	17.3
Agree	79	21.1
Strongly agree	106	28.3
Total	375	100.0

From the table 4.5 above, 67 respondents representing 17.9% strongly disagree that the information provided about Linda Mama program services is limited. Another 58 respondents at 15.5% slightly disagreed while 65 of the respondents indicating 17.3% were neutral. On the other hand, 79 respondents at 21.1% moderately agreed and the remaining 106 at 28.3% reported that they strongly agree that the information about the services under Linda Mama programme was limited. The findings show that majority of women in Mathare reported that the information they received about the services offered through Linda Mama programme are limited.

4.5.2 Awareness of the dangers of associated with home delivery

The study sought to find out how awareness of danger signs influence uptake of Linda Mama programme. The responses from the respondents are as shown in table 4.6

Table 4.6 Awareness of the dangers of associated with home delivery

	Frequency	Percent
Strongly disagree	51	13.6
Disagree	43	11.5
Neutral	134	35.7
Agree	101	26.9
Strongly agree	46	12.3
Total	375	100.0

Table 4.6 above shows survey findings where, 51 respondents representing 13.6% strongly disagreed that that women knew the dangers associated with home delivery. Another 43 at 11.5% were in disagreement while 134 representing 35.7% were neutral. On the other hand, 101 respondents at 26.9% agreed and another 46 at 12.3% strongly agreed. These findings show that majority of the respondents understand the dangers associated with home delivery and thus are appreciative of safe delivery in a health facility. Linda Mama programme is geared towards ensuring all women deliver in safe environments of the health facility.

4.5.3 Registration process to the Linda Mama Programme is cumbersome

The researcher wanted to indicate the extent to which registration process influence uptake of Linda Mama programme. Their responses were as shown in table 4.7

Table 4.7 Registration process to the Linda Mama Programme is cumbersome

	Frequency	Percent
Strongly disagree	34	9.1
Disagree	34	9.1
Neutral	30	8.0
Agree	137	36.5
Strongly agree	140	37.3
Total	375	100.0

The findings indicated in table 4.7 above show that 34 respondents strongly disagreed that Linda Mama registration process was cumbersome while another 34 at 9.1% disagreed and 30 respondents representing 8.0% were neutral. 137 respondents representing 36.5% agreed that

the registration process was cumbersome and the remaining 140 at 37.3% strongly agreed with the same. These findings show that a majority of the respondents agree that the registration process to the Linda Mama programme in Mathare is cumbersome.

4.6 Attitude of healthcare service providers

The respondents were asked to indicate the extent to which attitude of health care service provider influence uptake of Linda Mama health care delivery programme.

4.6.1 Perception of the respondents with regards to the attitude of their healthcare service providers

The responses of the respondents are as shown in table 4.8

Table 4.8 The Attitude of my health service provider is very good

	Frequency	Percent
Strongly disagree	20	5.3
Disagree	36	9.6
Neutral	59	15.7
Agree	156	41.6
Strongly agree	104	27.7
Total	375	100.0

The findings presented in table 4.8 above show that 20 respondents at 5.3% strongly disagreed that the attitude presented by their health service providers was very good. There were 36 respondents representing 9.6% that reported not agreeing. In addition, 59 respondents representing 15.7% were neutral while 156 at 41.6% agreed and another 104 at 27.7% strongly agreeing. These findings show that majority of the respondents reported that their health service providers attitude was not very good.

4.6.2 Respondents' experience with healthcare service providers

The respondents were asked to indicate how the extent to which their experiences affect uptake of Linda Mama health care delivery programme. Their responses were as shown in table 4.9

Table 4.9 I had a good experience in my last visit to the healthcare service provider

	Frequency	Valid Percent
Strongly disagree	40	10.7
Disagree	46	12.3
Neutral	150	40.0
Agree	101	26.9
Strongly agree	38	10.1
Total	375	100.0

Table 4.9 above presents findings where 40 respondents representing 10.7% strongly disagreed that they had a good experience in their last visit to the health service provider. Fourty six respondents at 12.3% reported that they disagreed that they had a good experience in their last visit while 150 at 40% were neutral. On the other hand, 101 respondents indicating 26.9% reported that they agreed having had a good experience with another 38 at 10.1% strongly agreeing that they had a good experience. The larger percentage of women that were neutral were perceived probably to having not visited any maternal health facility offering Linda Mama programmes in the past and thus could not tell of any experience on the same.

4.6.3 Community's influence on women's' uptake of Linda Mama Programme services

The respondents were asked to indicate the extent to which the experiences of other community members influence their uptake of the Linda Mama programme. Their responses are as shown in table 4.10

Table 4.10 Community's experiences influences my uptake of Linda Mama Programme services

	Frequency	Percent
Strongly disagree	170	45.3
Disagree	73	19.5
Neutral	43	11.5
Agree	48	12.8
Strongly agree	41	10.9
Total	375	100.0

Findings presented in Table 4.10 above reports that 170 respondents at 45.3% strongly disagrees that the experiences of their friends in the community influence their uptake of Linda

Mama programme services. Another 73 representing 19.5% disagreed, as 43 respondents at 11.5% remained neutral. The other 48 respondents at 12.8% agreed and in addition, 41 more at 10.9% strongly agreed that the experiences of their friends in the community had an influence on their decision to take up the service. The larger percentage that disagreed shows the higher level of independent decision making by the respondents in taking up maternal healthcare services under Linda Mama programme.

4.7 Quality of healthcare under Linda Mama Programme

The respondents were asked to indicate the extent to which quality of healthcare under the programme affect uptake of the Linda Mama programme

4.7.1 Satisfaction with services rendered through Linda Mama Programme

Their responses were as indicated in Table 4.11

Table 4.11 Satisfaction with services rendered through Linda Mama Programme

	Frequency	Percent
Highly dissatisfied	69	18.4
Dissatisfied	79	21.1
Neutral	53	14.1
Satisfied	121	32.3
Highly satisfied	53	14.1
Total	375	100.0

The table 4.11 above shows survey findings where 69 respondents at 18.4% reported that they were highly dissatisfied with the services offered under the Linda Mama programme. In addition, 79 respondents representing 21.1% said they were dissatisfied whereas those who were neutral were 53 respondents at 14.1%. On the other hand, 121 respondents at 32.3% indicated that they were satisfied with another 53 reporting highly satisfied. This shows that majority of the respondents were at least satisfied with the kind of services offered under the Linda Mama programme.

4.7.2 Efficiency and speed of Linda Mama Programme service delivery

The respondents were asked to indicate the influence of efficiency and speed of service delivery under the programme on uptake of the Linda Mama programme. Their responses were as in table 4.12

Table 4.12 Linda Mama Programme service delivery is quick and efficient

	Frequency	Percent
Strongly disagree	90	24.0
Disagree	68	18.1
Neutral	60	16.0
Agree	76	20.3
Strongly agree	81	21.6
Total	375	100.0

The findings in the Table 4.12 above show that 90 respondents representing 24% strongly disagreed that the services under Linda Mama programme were quick and efficient. Another 68 respondents at 18.1% disagreed while 60 at 16% were neutral. On the other hand, 76 respondents at 20.3% agreed with another 81 respondents at 21.6% saying they strongly agreed that services under the Linda Mama programme were quick and efficient. These findings show a near even distribution between those who agree and those who do not agree indicating mixed feelings among the respondents.

4.7.3 Availability of drugs for patients under Linda Mama Programme

The respondents were asked to indicate the extent to which availability of drugs for patients affect their uptake of the Linda Mama programme. Their responses were as in Table 4.13

Table 4.13 Women under Linda Mama Programme are asked to purchase additional drugs and other commodities

	Frequency	Percent
Strongly disagree	43	11.5
Disagree	46	12.3
Neutral	73	19.5
Agree	107	28.5
Strongly agree	106	28.3
Total	375	100.0

Table 4.13 above shows survey findings where 43 respondents at 11.5% reported that they strongly disagreed that women were asked to purchase additional drugs and other commodities under the Linda Mama programme. Another 46 respondents representing 12.3% recorded that they disagreed whereas 73 of the respondents representing 19.5% were neutral. Those that agreed were 107 representing 28.5% with additional 106 at 28.3% saying they strongly agree. These findings indicate that majority of the respondents had either at one point been asked to purchase additional drugs and other commodities or experienced some women being asked to do so.

4.8 Uptake of Linda Mama Programme

The respondents were asked to indicate how the following issues affect acceptance of the Linda Mama programme.

4.8.1 Level of acceptance of Linda Mama Programme

The responses of the respondents were as indicated in Table 4.14

Table 4.14 Level of acceptance of Linda Mama Programme

	Frequency	Percent
Strongly reject	43	11.5
Reject	47	12.5
Undecided	138	36.8
Accept	109	29.1
Strongly accept	38	10.1
Total	375	100.0

The survey findings presented in table 4.14 above indicates that 43 respondents representing 11.5% reported that they strongly rejected the Linda Mama programme. Another 47 respondents at 12.5% said that they rejected the programme as 138 respondents at 36.8% choosing to stay undecided. On the other hand, 109 respondents representing 29.1% said they accepted the programme with another 38 at 10.1% strongly accepting the programme. This shows that a majority of the interviewed women accepted the Linda Mama programme.

4.8.2 Health status of babies born under Linda Mama Program

The respondents were asked to indicate the extent to which health status of babies born under the Linda Mama programme affect their uptake of the programme. The responses of the respondents were as in Table 4.15

Table 4.15 Health status of babies born under Linda Mama Program

	Frequency	Percent
Highly unhealthy	90	24.0
Unhealthy	58	15.5
Not sure	38	10.1
Healthy	101	26.9
Strongly healthy	88	23.5
Total	375	100.0

The findings presented in table 4.15 above show that 90 respondents representing 24% reported that children born under the Linda Mama programme were highly unhealthy. Another 58

respondents at 15.5% recorded that the children were unhealthy with another 38 at 10.1% saying they were not sure. On the other hand, 101 respondents indicating 26.9% reported that healthy children were born under Linda Mama programme with another 88 at 23.5 saying the children born under Linda Mama programme were highly healthy. These findings report that a majority of the women acknowledge that at least healthy children are born under the Linda Mama programme.

4.8.3 Status of Linda Mama Programme in handling complications

The respondents were asked to indicate the extent to which the status of the programme to handle complications affects the uptake of Linda Mama programme. The responses are as in Table 4.16 below.

Table 4.16 How do you feel Linda Mama Programme has Contributed to the number of Reported Complications?

	Frequency	Percent
Highly reduced	32	8.5
Reduced	48	12.8
Nothing has changed	47	12.5
Increased	148	39.5
Highly increased	100	26.7
Total	375	100.0

Table 4.16 above shows findings on the perception of the respondents with regards to the contribution of Linda Mama programme in handling complications. The findings are that 27% of the respondents feel the program has highly reduced the number of reported complications and another 39% feel the program has moderately reduced the complications. 13% of the respondents that felt nothing had changed. On the other hand, another 13% of the respondents noted that the program had moderately increased the number of complications compared to 9% that strongly believed Linda Mama programme had highly increased the number of complications.

4.9 Regression Model

Regression analysis is a statistical method concerning estimating relationship between the variables of interest in a study. The researcher sought to determine the relative importance of each of the variables with respect to the uptake of maternal healthcare delivery programmes by women in informal settlements. The relative effect of each of the independent variables on the dependent variable is presented in the regression model below.

Table 4.16 Regression Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487a	.238	.229	.74714

a. Predictors: (Constant), Demographic background, Awareness of the programme, Attitude of healthcare providers, Quality of healthcare services

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	64.333	4	16.083	28.812	.000[b]
	Residual	206.540	370	.558		
	Total	270.873	374			

a. Predictors: (Constant), Demographic background, Awareness of the programme, Attitude of healthcare providers, Quality of healthcare services

b. Dependent Variable: Uptake of Linda Mama programme

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.070	.291		10.559	.000
	Demographic background	-.186	.076	-.116	-2.437	.015

Awareness of Linda Mama programme	.463	.053	.434	8.789	.000
Attitude of Healthcare service providers	.182	.055	.155	3.325	.001
Quality of healthcare	-.426	.051	-.424	-8.298	.000

a. Dependent Variable: Uptake of Linda Mama programme

The model summary indicated that about 23.8% of the data could be accounted for in the regression model (R = 0.487) indicating that it was significant to mean that the model had not been computed by chance. This made the results of the regression model credible and reliable to illustrate the regression model.

The results indicated that there was a significant relationship between the demographic background of the beneficiaries (p=0.015) and uptake of Linda Mama programme. The findings also indicated a significant relationship (p= 0.000) between awareness of the programmes and uptake of Linda Mama programme. In addition, there is a significant relationship between attitude of healthcare service providers (p=0.001) and uptake of Linda Mama programme. The results also indicated a significant relationship between quality of healthcare services (p=0.00) and uptake of Linda Mama programme.

In assessing the regression model for the uptake of Linda Mama programmes as per the indicators in the study, the study evaluated the standardized coefficients of the study and illustrated the results as indicated in the multiple linear model below.

Uptake of Linda Mama programme among women in informal settlements= 4.34 (Awareness of Linda Mama programme) – 0.118 (Demographic background of the beneficiaries) + 0.155 (Attitude of healthcare service providers) - 0.424 (Quality of healthcare services in the health facilities).

CHAPTER FIVE

SUMAMRY AND DISCUSSIONS OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter will outline the summary and discussions of the findings, conclusions and recommendations and suggests area for further studies.

5.2 Summary of the Findings

This section presents the summary of the findings from this research.

5.2.1 Awareness of Linda Mama Programme

Research findings indicate that majority of the women in Mathare slums believe that there is limited information available about the Linda Mama programme. They also acknowledge that women in Mathare understand the dangers associated with home delivery. In the same vein, they believe perceive that registration to the programme is cumbersome.

5.2.2 Attitude of health care service providers

The researcher found out that women in Mathare are happy about the attitude of their healthcare service providers although quite a substantial number were unsure. However, majority of the women were not certain of their experience in their last visit with a larger number indicating a good experience. In addition, the women acknowledge their right to decision making and thus reported that experiences from their friends and community members will not influence their decision on uptake of Linda Mama programme.

5.2.3 Quality of healthcare under Linda Mama Programme

From the survey, the researcher found out that majority of women in Mathare slums are satisfied with Linda Mama services including the healthcare. However, their perception on the speed and efficiency of service delivery under the programme was evenly spread with mixed reactions. Nonetheless, a majority believe the services are slow and inefficient. This probably could be the contributing to the larger number of women that are sent to purchase additional drugs and other commodities as reported by a majority of the women in Mathare slums.

5.2.4 Uptake of Linda Mama Programme

This research established that majority of women in Mathare slums are not decided on whether to take-up the programme or not. They however acknowledge the good health of children delivered under this programme and the fact that the programme has contributed to reduced complications during delivery.

5.3.5 Regression analysis

The analysed linear regression show that there is significant relationship between the dependent and independent variables. The regression also shows that some independent variables positively influence the dependent variable while others negatively influenced the dependent variable as indicated in the below formula;

Uptake of Linda Mama programme among women in informal settlements= 4.34 (Awareness of Linda Mama programme) – 0.118 (Demographic background of the beneficiaries) + 0.155 (Attitude of healthcare service providers) - 0.424 (Quality of healthcare services in the health facilities).

5.3 Discussions

The survey findings concur with findings by Jean, et al., (2008) and Concern Worldwide, (2007) that there is a significant relationship between awareness of maternal healthcare programmes and uptake of the programmes. Nonetheless, this research is of the opinion that even though awareness of the dangers associated with home delivery among women in informal settlements. New maternal healthcare programmes should be sensitive to their needs for registration and deliver sufficient information on the programmes.

With regards to the attitude of the healthcare service providers, the study finds that attitude of service providers have a significant influence on uptake of maternal healthcare programs. This is in line with conclusion by Chuma, et al., (2013) and Sripad, *et al.,* (2017) who confirmed that uptake of maternal health care delivery programmes and the decision to use the services in a particular facility is based on the reputation of the facility.

Mutuku, *et al.*, (2018) demonstrated that poor satisfaction by women on maternal health care delivery programmes has a direct relationship with the uptake of the delivery services. This study contradicts with this findings and observe that even if the Women may be satisfied with service delivery of the health facility, the quality of the service will negatively influence their

uptake of the program. This could be because of other accompanying factors like availability of proper medication and other consumables in the health facilities.

With regards to the influencing factors for the uptake of maternal healthcare delivery programmes in the informal settlements, the researcher is of the opinion that demographic background of the women, awareness of the programme, attitude of healthcare service providers as well as quality of services influence the uptake of such programmes. This is in line with opinions of Osindo, *et al*., (2014) and Anyangu, (2018).

5.4 Conclusion of the study

In view of the findings and discussions above, the researcher concludes that the demographic background of beneficiaries has an impact on the uptake of Linda Mama programme among women in Mathare slums. In addition, the research observed that awareness of the programs has an influence on the uptake of Linda Mama programme. It was further found out that attitude and quality of healthcare influences the ability of women to take up Linda Mama programme.

5.5 Recommendations for policy action

In view of the research findings and conclusions above, the researcher recommends that:

1. Developers of maternal healthcare delivery programmes should factor in effective monitoring and evaluation mechanisms in assessing the set out milestones in achieving the set objectives.
2. Carry out comparative study on uptake of maternal health care delivery programmes between women in urban areas and those in hard to reach areas.

5.5.1 Suggestions for further studies

1. Further studies to look in detail the influence of institutional governance on delivery of maternal healthcare programmes in the remote areas of North Eastern.

5.6 Contribution to the body of knowledge

This research contributes a wealth of knowledge to the project management body of knowledge by confirming that indeed demographic background of the women, awareness of the programme, attitude of healthcare service providers as well as quality of services influence the uptake of such programmes.

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APPENDICES

Appendix 1: Letter of Introduction

Bridgit Wausi Mutungi,

RE: RESEARCH DATA COLLECTION

I am a student pursuing degree of Master of Arts in project planning and management of the University of Nairobi. Undertaking a research project on, "PERCEIVED FACTORS INFLUENCING UPTAKE OF MATERNAL HEALTH CARE DELIVERY PROGRAMME AMONG WOMEN IN INFORMAL SETTLEMENTS IN NAIROBI COUNTY." The data being collected is purely for academic purposes and a copy of findings will be availed to you upon request. Any information received will be treated with strict confidentiality and at no point will your name or that of your organization be mentioned in the final report.

Your cooperation will be highly appreciated.

Yours faithfully

Signed,

Bridgit Wausi Mutungi,
Registration number: L50/5722/2017
MA-Project Planning and Management Student.

Appendix II-Questionnaire for Women of Reproductive Age

Section A-DEMOGRAPHC CHARACTERISTICS

1. Select your Age bracket

    15-25 [ ]
    26-35 [ ]
    36-49 [ ]
    Above 50 [ ]

2. Select your highest level of education.

    High school [ ]
    Diploma [ ]
    Degree [ ]
    Post Graduate [ ]

3. Select your current marital status.

    Single [ ]
    Married [ ]
    Widowed [ ]
    Divorced [ ]
    Separated [ ]

SECTION B-Awareness of the programme

Using a likert scale of 1-5 where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5= strongly Agree, to what extent do you agree with the following statements.

Statement	1 strongly disagree	2 disagree	3 Neutral	4 agree	5 strongly agree
Information about services through the Linda Mama Programmes are Limited					
Women know the dangers of Home Delivery					
Registration to the Linda Mama Programme. programme is cumbersome					

SECTION C- Attitude of Health Care Service Provider

Using a likert scale of 1-5 where 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5= strongly Agree, to what extent do you agree with the following statements.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
In my view, the attitude of my health service provider is very good.					
I had a good experience from my last visit to the healthcare service provider.					
The experiences of my women friends in the community affect my uptake of services offered through the programme.					

SECTION D-QUALITY OF HEALTH CARE

1. Are you Satisfied with Linda mama Services?

   Highly dissatisfied [ ]
   Dissatisfied [ ]
   Neutral [ ]
   Satisfied [ ]
   Highly satisfied [ ]

2. Services offered through Linda Mama is usually quick and efficient.

   Strongly disagree [ ]
   Disagree [ ]
   Neutral [ ]
   Agree [ ]
   Strongly agree [ ]

3. Women under Linda Mama are asked to purchase additional drugs and other commodities

   Strongly disagree [ ]
   Disagree [ ]
   Neutral [ ]
   Agree [ ]
   Strongly agree [ ]

SECTION E: Up-Take of Maternal Health Care Delivery Programme among Women In Informal Settlements

1. Level of Acceptance of Linda Mama Program

   Strongly reject [ ]
   Reject [ ]
   Undecided [ ]
   Accept [ ]
   Strongly accept [ ]

2. Health Status of Babies Born under Linda Mama Program

   Highly unhealthy [ ]
   Unhealthy [ ]
   Not sure [ ]
   Healthy [ ]
   Strongly healthy [ ]

3. How do you feel Linda Mama programme has contributed to the number of reported complications?

   Highly reduced [ ]
   Moderately reduced [ ]
   Nothing has changed [ ]
   Moderately increased [ ]
   Highly increased [ ]

Thank you for taking time to participate in the study.

Appendix III - Interview Schedule for Key Informant At The Pumwani Maternity Hospital

Designation of the key informant………………….

To begin tell me a little bit how you are involved in the Maternal health care delivery programme, Linda Mama? ....

1. What trends have been reported on the uptake of the Linda mama delivery programme by women from informal settlements in the hospital?
2. What are some of the key demographic characteristics you have noted contribute in the uptake of Linda Mama programme?
3. In your opinion are women aware of the services offered through the Linda Mama programme?
4. How does the attitude of health care providers foster uptake of
5. What are some of the challenges you have encountered that hinder the quality of care offered through the Linda Mama programme?
6. In your opinion what additional resources will be required to increase the uptake of the services in the Linda Mama programme among women from informal settlements?
7. Any other comments……………………………