

**UTILIZATION AND HEALTH FACILITY BARRIERS OF SEXUAL AND
REPRODUCTIVE HEALTH SERVICES AMONG FEMALE SEX
WORKERS IN NAIROBI CITY COUNTY, KENYA.**

**BEATRICE NANGEKHE BWABI
Q139CTY/PT/37421/2016**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD DEGREE OF MASTERS OF
REPRODUCTIVE HEALTH IN SCHOOL OF PUBLIC HEALTH AND
APPLIED HUMAN SCIENCES OF KENYATTA UNIVERSITY**

OCTOBER, 2022

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature Date.....

Beatrice Nangekhe Bwabi
Q139CTY/PT/37421/2016

This thesis has been submitted for review with our approval as University Supervisors.

Signature Date.....

Dr. Jane Kieru (PhD)
Department of Population Reproductive Health and Community Resource Management
Kenyatta University

Signature..... Date.....

Dr. Maurice K'Odhiambo (M. Pharmacy MA)
Department of Pharmacy
Kenyatta University

DEDICATION

To my husband Moses Bwabi for the encouragement and support accorded to excel in my professional studies. To my children, Phanice, Edna, Keziah and Keren for your love and moral support. To my grandchildren olive and Oak as a sign for you to excel in your studies.

ACKNOWLEDGEMENT

To God Almighty for the Grace and favour to carry out this study. My supervisors Dr. Jane Kieru and Dr. Maurice KODhiambo, your dedication and technical support was overwhelming and kept me optimistic to accomplish the study. I appreciate my family especially my husband for encouraging me to pursue further studies in my career and the financial support to accomplish this study. To my children, Phanice, Edna, Keziah and Keren. I am humbled for your love and support in typing correction and moral support. Thank you Embakasi Sub- County colleagues for the data collection and computing. To all the research assistants editorial team and final bindings of the thesis team, I applaud you for the commitment to produce the final book. The entire community and respondents to appreciate your participation in the study. This could not have been realized without you. God Bless you all.

TABLE OF CONTENTS

| | |
|---|-------------|
| DECLARATION..... | ii |
| DEDICATION..... | iii |
| ACKNOWLEDGEMENT..... | iv |
| TABLE OF CONTENTS..... | v |
| LIST OF FIGURES | ix |
| LIST OF TABLES | x |
| ABBREVIATIONS AND ACRONYMS | xi |
| OPERATIONAL DEFINITION OF TERMS..... | xii |
| ABSTRACT | xiii |
| CHAPTER ONE: INTRODUCTION | 1 |
| 1.1 Background of the Study | 1 |
| 1.2 Problem statement | 2 |
| 1.3 Justification..... | 3 |
| 1.4 Study Objectives..... | 4 |
| 1.5 Specific objectives | 4 |
| 1.6 Research Questions | 5 |
| 1.7 Hypotheses | 5 |
| 1.8 Significance | 5 |
| 1.9 Limitations..... | 6 |
| 1.9.1 Delimitations | 6 |
| 1.10 Theoretical framework | 6 |
| 1.10.1 Self-determination theory..... | 6 |
| 1.10.2 Critical Medical Anthropology theory (CMA) | 7 |
| 1.11 Conceptual Framework..... | 7 |

| | |
|--|-----------|
| CHAPTER TWO: LITERATURE REVIEW | 9 |
| 2.1 Introduction | 9 |
| 2.2 Demographic factors in SRHs utilization by FSWs | 9 |
| 2.3 Association of FSWS Knowledge on SRH services and utilization of SRHS..... | 10 |
| 2.4 Perception of female sex workers on utilization of Sexual and Reproductive health services..... | 10 |
| 2.5 Facility based barriers to female sex workers in seeking SRHs..... | 11 |
| 2.6 Identified gaps | 11 |
| CHAPTER THREE: METHODOLOGY | 13 |
| 3.1 Introduction | 13 |
| 3.2 Study design | 13 |
| 3.3 Study variables | 13 |
| 3.3.1 Dependent variable..... | 13 |
| 3.3.2 Independent variables..... | 13 |
| 3.4 Location of the study | 13 |
| 3.5 Target population..... | 14 |
| 3.6 Sample size determination..... | 14 |
| 3.7 Sampling technique | 15 |
| 3.8 Data collection instruments | 15 |
| 3.9 Pre-Testing | 16 |
| 3.9.1 Validity..... | 16 |
| 3.9.2 Reliability..... | 16 |
| 3.10 Data collection techniques..... | 17 |
| 3.11 Data Analysis..... | 17 |
| 3.12 Logistical and ethical considerations..... | 18 |

| | |
|---|-----------|
| CHAPTER FOUR: FINDINGS AND DISCUSSIONS..... | 19 |
| 4.1 Introduction | 19 |
| 4.2 Response rate..... | 19 |
| 4.3 Socio-demographic characteristics | 19 |
| 4.4 Level of knowledge on sexual reproductive health services | 20 |
| 4.4.1 Prior knowledge of sexual reproductive health services..... | 20 |
| 4.4.2 Where they sought health services | 21 |
| 4.4.3 Affordability of SRHS | 21 |
| 4.4.4 Signs and symptoms of sexually transmitted infections | 22 |
| 4.4.5 Prevention of Sexually Transmitted Infections..... | 22 |
| 4.4.6 Have you heard about safe sex? | 23 |
| 4.4.7 HIV Screening..... | 23 |
| 4.4.8 Frequency of HIV Screening | 24 |
| 4.4.9 Initiating ante-natal care..... | 24 |
| 4.4.10 Unplanned Pregnancies..... | 25 |
| 4.5 Utilization of Sexual Reproductive Health Services | 26 |
| 4.6 Perceptions on Sexual Reproductive Health Utilization | 26 |
| 4.7 Barriers to Seeking Sexual Reproductive Health Services..... | 27 |
| 4.8 Hypothesis Testing | 29 |
| 4.8.1 Association between age group and utilization of SHRS | 30 |
| 4.8.2 Relationship between Number of children and the utilization of SRHs ... | 30 |
| 4.8.3 Association between marital status and utilization of SRHs | 31 |
| 4.8.4 Association between Employment and Utilization of SHRs | 31 |
| 4.8.5 Relationship between level of education and Utilization of SHRs | 32 |
| 4.8.6 Relationship between level of Education and Utilization of SRHs | 32 |
| 4.9 Content analysis..... | 34 |

| | |
|--|-----------|
| 4.10 Discussion of findings | 36 |
| 4.10.1 Influence of FSWs’ socio-demographic characteristics on SRHS..... | 37 |
| 4.10.2 Influence of Knowledge on SRH on utilization of SRHs by FSWs | 37 |
| 4.10.3 Perception and utilization of Sexual and Reproductive Health Services | 38 |
| CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS..... | 42 |
| 5.1 Introduction | 42 |
| 5.2 Summary of findings | 42 |
| 5.2.1 Influence of Socio-demographic characteristics on Utilization of SHRS. | 42 |
| 5.2.2 Influence of knowledge on SRH on the utilization of SRHs | 43 |
| 5.2.3 To Determine the Perceptions of FSWs on the utilization of SRHS | 43 |
| 5.2.4 Barriers to seeking sexual and reproductive health Services | 44 |
| 5.3 Conclusions | 44 |
| 5.4 Recommendations | 45 |
| 5.5 Suggestions for further Research..... | 46 |
| BIBLIOGRAPHY | 47 |
| APPENDICES | 51 |
| Appendix I: Questionnaire..... | 51 |
| Appendix II: Key Informant Interview Guide | 56 |
| Appendix III: Group Interview Guide | 57 |
| Appendix IV: Research Authorization | 58 |
| Appendix V: Research Authorizations: Nairobi County..... | 59 |
| Appendix VI: Map of Nairobi County | 61 |
| Appendix VII: Research Permit | 62 |

LIST OF FIGURES

Figure 1.1: Conceptual framework 8

LIST OF TABLES

| | |
|---|----|
| Table 3.1: Reliability Test..... | 17 |
| Table 4.1: Response rate | 19 |
| Table 4.2 Socio-demographic characteristics | 20 |
| Table 4.3: Where do you seek Health Services..... | 21 |
| Table 4.4: Affordability | 22 |
| Table 4.5 Signs and Symptoms of sexually transmitted infections..... | 23 |
| Table 4.6 Sexually transmitted Infections..... | 23 |
| Table 4.7 Knowledge about safe sex..... | 23 |
| Table 4.8 HIV Screening..... | 24 |
| Table 4.9 Intervals for screening..... | 24 |
| Table 4.10 Start of ante natal clinic | 25 |
| Table 4.11 Best course of action in case of unwanted pregnancies | 25 |
| Table 4.12 Level of utilization of SRHs | 26 |
| Table 4.13 Perception of Utilization of Sexual Reproductive Health Services | 27 |
| Table 4.14 Have you experienced barriers when seeking SRHs | 28 |
| Table 4.15 Barriers when seeking sexual reproductive health services..... | 29 |
| Table 4.16 Association between Age group and utilization of SRHs..... | 30 |
| Table 4.17 Relationship between Number of children and the utilization of SRHs.. | 30 |
| Table 4.18 Association between Marital Status and utilization of SRHs | 31 |
| Table 4.19 Association between source of employment and utilization of SRHs..... | 32 |
| Table 4.20 Association between Level of education and utilization of SRHs..... | 33 |
| Table 4.21 Relationship between knowledge and utilization of SRHs..... | 33 |

ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| AIDS | Acquired Immune Deficiency Syndrome |
| DIC | Drop In Centre |
| eMTCT | elimination of Mother To Child Transmission |
| FSW | Female Sex Worker |
| HIV | Human Immunodeficiency Virus |
| HPV | Human Papilloma Virus |
| KAF | Kenya Aids Strategic Framework |
| KEPH | Kenya Expanded Package of Health |
| SGBV | Sexual Gender Based Violence |
| SRH | Sexual Reproductive Health |
| STIs | Sexually Transmitted Infections |
| SWOP | Sex Worker Outreach Program |
| UNAIDS | United Nations Program on HIV/AIDS |
| WHO | World Health Organization |

OPERATIONAL DEFINITION OF TERMS

Female Sex Workers

These are women who provide sexual services in exchange with money or goods to earn a living. In this study they are women who engage in sexual intercourse for money. Rios, Victor M. (2011)

Criminalization

The action of turning someone into a criminal by making their activities illegal, in this study is where health providers report FSWs to law enforcers for possible prosecution. Walklate (2003)

Barriers:

In this study, these are challenges that prevent FSWs from obtaining the desired sexual reproductive health care from health facilities while seeking HIV comprehensive care.

Stigma

The art of disgrace showed to FSWs by service providers whenever they seek services at Embakasi Sub County Health Facilities in relation to their engagement to sex worker.

Sexual Reproductive Health

In this study, it refers to the 5 components of reproductive health offered to FSWs in Nairobi City County. This include maternal care from pregnancy to after delivery, family planning gender based violence, post abortal care, cervical cancer screening, sexually transmitted infection screening and treatment. UNFPA (2022)

ABSTRACT

Female sex workers(FSWS) are categorized as key population due to the high risk they face from their sexual behaviour, stigma from the society and discriminative laws that affect them in seeking preventive and curative health services. Sub Saharan countries report deaths from HIV, unsafe abortion, and unskilled deliveries. Studies in Nairobi county has revealed 25% of female sex workers. The female sex workers who contribute to 5% of reproductive health women are at risk of sexual reproductive health complications because of their weak negotiation power for safe sex and poor health seeking behaviors. The study was conducted in selected hot spots in Nairobi county through a cross-sectional design. The specific objectives included, to determine the influence of socio-demographic characteristics on SRHS utilization among FSWS, to assess the association of knowledge on SRHS and utilization among FSWS, to establish the perception of FSWS on SRHS utilization and to determine barriers faced by FSWS while accessing SRHS in Nairobi County. The self-determination theory was used to probe up internal motivators towards psychological growth among FSWS. Critical Medical Anthropology Theory was used to explain ways in which health services are differentially allocated based on social factors and perceptions. The determination of sample size was conducted through Fisher et al. formulae and attrition rate of 10%, which added to 421 respondents through snow ball sampling. The data collection was done using qualitatively and quantitative methods through structured questionnaires, focused group interview and key informants. The cleaned data was processed through SPSS software v.22. The study established that social demographic characteristics and knowledge have a relationship with sexual and reproductive health services utilization through the Chi-Square test of independence ($P=0.01<0.05$). The study further established that FSWS had perception towards SRHS utilization through content analysis of focused group interview and likert scale measurement. The perceptions towards utilizing sexual reproductive health services played a big role in seeking of the services by the female sex workers as evidenced by a high average mean (M- 4.22, SD- 0.96). Similarly, the respondents agreed that the rate of SRHS utilization was affected by many barriers, (M- 4.01, SD- 0.938) , poor quality services, lack of time and or inconveniencing clinic schedules. The study recommends that targeted health education on SRHS for FSWs be implemented consistently, sensitization of HCWs on friendly SRHs among FSWs, integration of SRHs among other programs like outpatient and maternal clinic to scale up utilization. To provide information, education and communication materials on SRHS to FSWS.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Globally, undesirable outcomes of sexual and reproductive health (SRH) services lead to significant levels of morbidity and mortality among girls and women (DFID 2004). The 1994 United Nations international conference on population and development (ICPD,1994) brought together official representatives from various countries to formulate guidelines and implement strategies for universal coverage of SRH services.

In 2007, Kenya developed the Reproductive Health policy. This was followed by the constitutional provision of right to a highest attainable standards of health care following the promulgation of the constitution in the year 2010 (constitution of Kenya article 43 (1). A Chinese study reported below par knowledge about SRH services, high but unmet demand for new-age contraceptive methods and a high rate of unwanted pregnancy among female sex workers (Kunning et al, 2015).

An Ethiopian study on a similar theme also reported that FSWS lack knowledge and information on SRHS (Hailu 2015). From a similar study in Kenya, it was reported that there was low utilization of SRHS among FSWS (Yves, et al, 2017). It is also common for FSWS and other vulnerable persons to be omitted from national strategies and initiatives around the world, making provision of their health care needs to lag behind (Njeri, 2016). FSWS are often criminalized thus making their activities more venerable and risk to poor health outcomes. Access to SRH services is a fundamental human right and a significant development issue, and enhancing maternal health is one of the millennium objectives that some countries have tried to achieve by cutting maternal mortality by two-thirds. (United Nations, 2013). This

study looked at themes that are often overlooked such as post abortion services, Maternal Health Care, and Sexually Transmitted Infections. Previous research has shown that in Sub-Saharan Africa, approximately 5% of the population are often of a reproductive age (Odek, Githuka, and Avery, 2014).

1.2 Problem statement

Globally, more than 120 million couples have contraceptive needs that are unmet, 42 million unsafe abortions, 80 million unintended pregnancies and 340 million cases of Sexually Transmitted Infections (Department for International Development (2004). In the year 2012, almost half a million induced abortions were reported in Kenya, 70% of which were in persons who never used any form of contraception and 11% contributed to maternal deaths. These statistics are not supportive to one of the big 4 agenda of the government of Kenya, that is, Universal Health Coverage to all households (Andisa, 2018)

A study by Willis et al, (2014) mapped 103,298 active female sex workers (FSWs) in Kenya with 25% from Nairobi County reported that 5 % of women aged 15-49 years are likely to be FSWs. This is an undesirable trend that needs to be mitigated. SRH is an essential component of the health of women, girls and the general population. FSWs often experience SRH complications that affect their health hence leading to higher rates of child and maternal deaths and HIV prevalence due to poor access to SRH services.

A study done in Dhaka city in 2017 among FSWs reported that more than 51% of them had faced barriers while seeking SRH care (Anadil et al,2017). 72 % of them also reported facing financial difficulties, 52.3% stated it was shameful to seek SRHs, whereas just one third of the respondents reported satisfaction with the

services. According to Baral et al, (2012), sex work in low-income nations is characterized by poverty, chronic violence, illegality, and frequent human rights violations. A study in Kenya (Yves, 2017) reported low uptake of SRHs by FSWs. This study therefore focused on the utilization of SRH services in the context of assessment of the individual FSWs. According to Health Belief Model, perception of risk by an individual is critical in modifying health behavior. This perception is influenced by several factors including demographic characteristics as supported by Kurtz et al, 2005.

There is scientific evidence that, “delays in seeking and obtaining diagnosis and treatment compromise prognosis “Women who engage in sex for sale in Sub Saharan Africa, Kenya included, are at high risk of physical and sexual violence, unwanted pregnancy and acquisition of sexual transmitted infections (Behets, 2013). These could contribute to poor performing maternal and child indicators as well as high morbidity and modality rates. A study conducted in Uasin Gishu County, Kenya reported 34.8% FSWS who did not seek SRH cited barriers which were both individual and structural, that included long turnaround time, unfriendly service providers and long distances to health facilities. Following these findings FSWS are faced with couple of challenges to hinder them from accessing health care and more so the SRHS that are linked to the nature of work they do. This puts them at risk of poor sexual reproductive health outcomes as alluded by Nyamathi et al, (2007) that chronic diseases, low socioeconomic status, and a lack of resources and education all contribute to the premature death of vulnerable groups.

1.3 Justification

Sex work has accelerated HIV-AIDS pandemic in Sub-Saharan Africa, Eastern Europe and South East Asia (UNAIDS in 2010) and Aids Fonds in (2014). Globally,

approximately 106,000 deaths from HIV are associated with sex work; 98,000 of which occur in sub-Saharan Africa. In Nairobi County, 31% of maternal deaths are attributed to unsafe abortion (Shukri, 2015). The prevalence of HIV was very high (29.3%) as a result of FSWs. Those who reported engaging in early sex are: 15years and above (63.1%), 10-19years (28.3%) and 4-9years (23.3%).

Sexually transmitted infection (STI) recorded a range of 28.1 percent to 95 percent for candidiasis, 15.3% for bacterial vaginosis, 10.3% for trichomoniasis, 3.1% for chlamydia, 1.1% for gonorrhoea, and 0.9% for syphilis. Up to 24.2% of FSWs contracted at least one of the above STIs.

A research study in Kenya indicated that Nairobi County had approximately 2762 female sex workers (FSWs) (Willis et al, 2014). This high number of FSWs contributes to key indicators of prevalence of HIV, utilization of contraceptives, neonatal mortality, maternal mortality, immunization, and skilled births. Delays in seeking and obtaining diagnosis and treatment compromise diagnosis. The findings of this study are useful for informing strategies for scaling up SRH service utilization among FSWs in the Nairobi.

1.4 Study Objectives

The general objective of the study was to establish the level of utilization as well as barriers of SRHs among female sex workers in the selected hotspots in Nairobi, Kenya.

1.5 Specific objectives

- (i) To establish the association between socio-demographic attributes and utilization SRHs by FSWs in Nairobi

- (ii) To determine the influence of FSWs' knowledge about SRHs on utilization of SRHs in Nairobi.
- (iii) To establish the association between perceptions of FSWs on SRHs utilization in Nairobi.
- (iv) To determine health facility barriers faced by FSWs in accessing SRHs in Nairobi.

1.6 Research Questions

The objective 3 and 4 were governed by the subsequent research questions:

- (i) What are the perceptions of female sex workers on sexual and reproductive health services in Nairobi?
- (ii) What are the health facility barriers faced by FSWs in accessing sexual and reproductive health services in Nairobi?

1.7 Hypotheses

The hypotheses for objectives (i) and (ii) were as follows

- (i) **H₀₁**: There is no relationship between the socio-demographic characteristics of FSWs and the utilization of SRHs in Nairobi.
- (ii) **H₀₂**: There is no association between the knowledge about SRHs by FSWs' and the utilization of the services in Nairobi.

1.8 Significance

The study findings are useful in improving health service delivery to female sex workers in Nairobi. It is also useful in improving Reproductive Health Policy frameworks in especially with regard to hard-to-reach populations. Insights can also be drawn on key factors to address in improving access to quality sexual

reproductive health services by community-based organizations, private sectors and other stakeholders towards female sex workers.

It will also be a reservoir of knowledge which can act as reference for future researchers.

1.9 Limitations

Due to Kenyan laws and local by laws restricting commercial sex work, the respondents were likely to conceal some information for fear of stigmatization and or arrest. This limitation was mitigated by concealing the identity of the respondents and assuring them of the same.

The researcher conducted study in selected hotspots in Nairobi County due to complexity and insecurities surrounding some hotspots, this may have left out eligible respondents although the researcher selected a variety of hot spots across the county of Nairobi.

1.9.1 Delimitations

The respondents were sampled from FSWs who were aged 15-49 years who sought SRHs. Therefore, the information from other FSWs was not considered in this study.

1.10 Theoretical framework

The study was anchored on two theories; self-determination theory and Critical Medical Anthropology Theory (CMA).

1.10.1 Self-determination theory

This theory focuses on the need for internal sources of motivation to achieve psychological growth. Human beings need to feel autonomous in control of their behavior and gain mastery of tasks as well as learn skills to assist them attain their goals. The study borrowed from the theory to understand the things that motivate

behaviors of female sex workers towards health seeking behavior in relation to sexual reproductive health services as well as demotivators. The conclusion will guide in the study recommendations towards scale up of the services.

1.10.2 Critical Medical Anthropology theory (CMA)

The theory emphasizes on social relationships structure and not only biomedical factors. It analyzes health its determinants. This includes different strategies for the distribution of health services based on socioeconomic factors and perceptions (Kaufman et al, 2009), such as stigma and discrimination which often negatively modify health seeking behavior. The model was adopted for analyzing the various factors that affect utilization of health services by FSWs. The government and local non-governmental organizations (NGOs) have employed various strategies towards improving SRHs in Kenya. Through this model, health services can be allocated equitably to meet the needs of the different categories of the population, FSWs included.

1.11 Conceptual Framework

The conceptual framework illustrates the association between the dependent and independent variables that as shown in Figure 1.1.

Conceptual framework

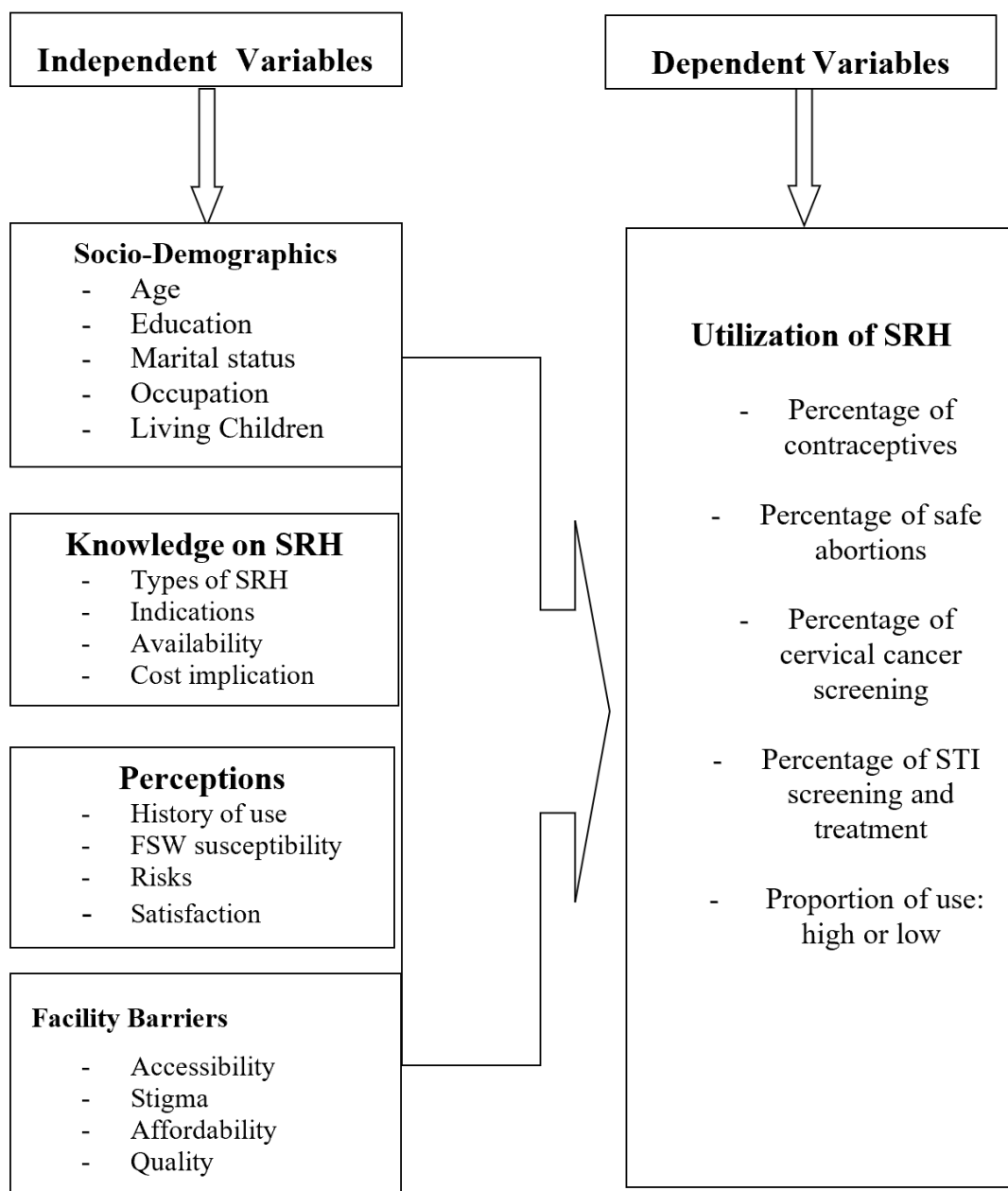


Figure 1.1: Conceptual framework

Source: Merrill Singer (1993)

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, empirical literature on utilization of SRHs by FSWs based on the study objectives. The literature is also scrutinized and analyzed to identify the gaps that needed to be addressed.

2.2 Demographic factors in SRHs utilization by FSWs

The Sustainable Developmental Goals (SDGs) adopted in September 2015 aimed to improve health, end poverty, reduce inequality and address climate change. The SRHs need therefore to be accessible to all individuals regardless of their socio-demographic characteristics. In this study, the socio-demographic factors of education, age, occupation, marital status, religious affiliation, number of children and years at sexual debut were studied. (Kenya policy, 2012-2030) This reference is incomplete

A study in Togo on HIV prevalence and risk behaviours among female sex workers with median age of 26 years found out that 49.2 % of participants had secondary level education (Bitty et al, 2017). A study conducted in India on demography and characteristics of female sex workers also revealed that those who engaged in sex work were illiterate (74.7%) and separated or divorced at 30.7% (Dandona, 2006).

Low socioeconomic status has been shown to increase likelihood to engage in sex trade (Ochere & Nanewortor, 2011). The same study of Ochere and Nanewortor in Ghana reported that, females without professional or vocational training were more likely to engage in prostitution compared to those with education. From a study conducted in Naivasha, Kenya, the mean age for FSWs seeking SRHs was reported as 28 years, the mean number of children was 2, over 50% lived with a sexual

partner whereas the mean age of sexual debut was 20 years. Less than 50% of the respondents had no other income. Another Kenyan study on the behavior change of FSWs reported that education, age, religion and marital status are key determinants of the change (Nyagero et al, 2012).

2.3 Association of FSWS Knowledge on SRH services and utilization of SRHS.

Health education is a vital component of health promotion and disease prevention. An Ethiopia study on access and utilization of SRHs reported that most of the FSWs have poor knowledge on safe sex practices and prevention of unwanted pregnancies (Reference). These findings concur with those of a study in China (Lim, et al., 2015) where FSWs reported unmet demand for modern contraception, high level of unplanned pregnancy and poor knowledge on SRHs, treatment and prevention of STIs, cervical cancer screening and sexual gender-based violence. However, a multicentre study in South Africa, Mozambique, Kenya, and India explored the level of knowledge and utilization of SRHs reported that there was significant variations in the outcomes between the regions (Lafort, et al., 2017).

2.4 Perception of female sex workers on utilization of Sexual and Reproductive health services

Even with improved availability and accessibility of SRHs perception is still a possible barrier to utilization of the services. According to Lutnick and Cohan (2009), greater vulnerability is attributable to a mix of circumstances, including stigma and particular legislation that impede access to prevention and care. A multicentre African study reported that failure by FSWs to disclose their status to care providers compromised HIV testing (Nyblade et al, 2015).

It has been reported that many female sex workers often do not take signs and symptoms or sexual and reproductive health problems such as itchy vulva, burning sensations or genital ulcers seriously (Emma Kalea CEDEP, year? Use only the last name and year of publication for in-text citation). A Bangladesh study indicated that up to 52.3% of female sex workers reported that shame barred them from seeking SRHs and only a third of them reported more than 50% satisfaction with SRHs (Anadil et al, 2017)

2.5 Facility based barriers to female sex workers in seeking SRHs

In almost 100 nations where sex work is prohibited, female sex workers experience discrimination (Scorgie et al, 2013). Behaviours such as unsafe sex due to stigma and fear of arrest increases risks to sexually transmitted infections (STIs). About 23.9% of sex workers in Kenya live with HIV (“National A.I.D.S and S.T.I Control Programme (NAS COP, 2013). The findings from a Bangladeshi study reported that up to 51% of FSWs stated that they faced barriers such as financial constraints, and shame in seeking SRHs. (Reference)

2.6 Identified gaps

Female sex work enhances vulnerability to complications of sexual and reproductive health problems as well as morbidity and mortality. Most studies reviewed focused on implications of sex work on the transmission of (STIs) including HIV and AIDS. Only a few of the studies looked at the barriers affecting utilization of health services by female sex workers. The Sustainable Development Goals targets to provide universal SRH to all, including at the community level. Most of the studies do not look at the utilization of SRH services but focus on the impact of sex work on other programs. Female sex workers are prone to adverse outcomes of SRHs due to

multiple sexual partners. There is evidence that the prevalence of HIV among sex workers is 29% and that they contribute to 14% of new HIV infections (Reference).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

In this chapter, the study site, design, population sampling, data collection, analysis and presentation are articulated. The chapter ends by outlining the ethical and logistical considerations that guided the study.

3.2 Study design

Cross sectional study design was adopted since the variables were examined at a given point in time. The design was also quick, affordable and simple hence strategic for use within the restricted timeframe.

3.3 Study variables

3.3.1 Dependent variable

In this study, the dependent variable was utilization of Sexual and Reproductive Health services among female sex workers.

3.3.2 Independent variables

The independent study variables were socio-demographic attributes of FSWs, knowledge on SRHs, perceptions and facility barriers.

3.4 Location of the study

The study was carried out in selected hot spots in Nairobi including Kayole, Umoja, Eastleigh, Ngara and Pipeline which have been shown to have the highest number of sex workers (Hussein, 2017).

3.5 Target population

The target population for the study was FSWS operating from selected hot spots in Nairobi City County. The criteria for recruitment were age 15-49 years and having resided in Nairobi for six months and above. The health care providers offering services in health facilities for FSWS within and at Nairobi County were also interviewed.

3.6 Sample size determination

The following formula was used to calculate the sample size (Fisher et al, 1998)).

$$N = \frac{Z^2 \times pq}{d^2} \text{ and corrected for population less than 10000 as } nf = n \left(1 + \frac{n}{N}\right)$$

where

N = the desired sample size for a population < 10 000

Z = the Normal Standard Deviate at a 95% CI which is 1.96

p = the prevalence of the desired characteristics in a population

Since the prevalence, was unknown, a prevalence of 50% was adopted.

q = 1 – p; which is 0.5

n = $1.96 * 1.96 (0.5 * 0.5) / 0.05 * 0.05$

n = $3.8 * 0.25 / 0.0025$

n = 385 respondents

The approximated sample size was 385. Assuming a 10% non-response, the required sample size was adjusted as follows;

$$10 \times 385 / 100 = 39$$

$$n = 385 + 39 = 421$$

Therefore, the sample size of 421 respondents was used in the study.

3.7 Sampling technique

The respondents to the study were selected through snow ball sampling in view of the nature of work involved. Female sex work is considered an illegal trade in Kenya and those who practice it are liable for prosecution, therefore any interviews are highly suspicious among them. The respondents were accessed through drop-in centers that are linkage to hot spots with assurance that the objective of the study was to improve quality of SRH among the FSWs. The research assistants were led and guided through the hot spots by peer educators who also serve as team leaders. All female sex workers who consented were enlisted as at their convenience. The research assistants administered the questionnaires but also dropped and collected for those who requested for additional time to fill-in. The focused group interview was conducted on peer educators from selected hot spots through purposive sampling depending on experience and availability to participate. The key informants were nurses and health information officers recruited through purposive sampling based on experience of working in SRHS among FSWS and willing to participate.

3.8 Data collection instruments

Questionnaires with open and closed questions were used in the study. The sessions of key informants and focused group interviews were conducted through two formulated interview guides. A total of twelve peer educators divided among four hotspots was recruited to form focused group interview. The participants who were recruited as key

informants were three health information officers and four nurses from the Sub-County. All respondents consented to participate in the study.

3.9 Pre-Testing

The researcher used the pilot test to certify that the items in the instruments were unambiguous and had the same interpretation to all respondents (Mugenda, 2008). The tools for data collection were subjected to test in Starehe Sub-County within Nairobi City County offering the same services. The sample size of 43 respondents were recruited from a 10% total study sample using convenience sampling (Cooper & Schindler, 2008). The tool was reviewed for any further modification as needed to accomplish the set objectives. Among the modifications made, was the adjustment of open-ended structured questions to closed-ended to facilitate the analysis of descriptive statistics for hypothesis testing.

3.9.1 Validity

This measured the extent to which studied data outputs accurately represented the phenomenon under investigation (Mugenda & Mugenda, 2003). An instrument exhibits validity when it measures what it intended to measure. To ensure content validity, the researcher sought expert opinions of the supervisors to improve the accuracy of the questions. In addition, research assistants were also trained with the same intention of improving validity.

3.9.2 Reliability

The extent to which the researcher ensured that results produced can be consistently reproduced across different observers under the same conditions was employed according to (Mugenda and Mugenda, 2003). Necessary adjustments were made to the research instrument to address identified errors, misunderstandings and omissions. “Cronbach’s Alpha” was used to estimate the degree of reliability. The coefficient has

a range 0 to 1 (Kipkebut, 2010). A range of 0.7 and above is acceptable (Field et al., (2012).

Table 3.1: Reliability Test

| Factor (Scale) | Cronbach's Alpha | Critical Value | Conclusion |
|------------------------------------|-------------------------|-----------------------|-------------------|
| Social-Demographic Characteristics | 0.825 | 0.7 | Reliable |
| Knowledge on SRHs | 0.793 | 0.7 | Reliable |
| Perceptions on SRHs | 0.892 | 0.7 | Reliable |
| Barriers | 0.718 | 0.7 | Reliable |

Socio-demographic attributes, knowledge on SRHs, perceptions on SRH and barriers Cronbach's Alpha value was all above 0.7 which is recommended.

3.10 Data collection techniques

A total 421 participants were recruited through peer educators leading hot spots. The 'drop and pick' later technique as guided by peer educators was employed to administer questionnaires. Introductions to FSWS was done and consent read to the respondents at the point of dropping the research instruments. The focused group members were selected peer educators who were led by the researcher through a questionnaire guide, while key informants filled the questionnaire individually. All eligible participants who agreed and signed the consent form participated in the study. However, those who were critically sick though eligible or unwilling to sign the consent forms or participate as respondents were excluded.

3.11 Data Analysis

Data was received from the field, checked and cleaned to ensure completeness before analysis. Raw data from the field was processed into information through cleaning,

editing and coding. The SPSS software was used to generate descriptive statistics. Further inferential analysis of relationships was conducted using the chi squared statistic. Data relating to the first and second objectives were analyzed using chi-squared statistic while those relating to the third and fourth objectives were analyzed by use of a Likert scale and generation of means and standard deviations. The results were presented in the form of graphs, tables, and charts.

3.12 Logistical and ethical considerations

Ethical approval was obtained from Kenyatta University research and ethics committee. Logistical approvals were obtained from the Kenyatta University graduate school and National commission for science technology and innovation (NACOSTI) as well as the ministry of education and Nairobi County health services. All other relevant protocols from the Sub-County Medical officer of health, health facility in-charges and drop in center managers were conducted to ensure smooth entry for data collection. All ethical principles regarding research involving human subjects as per the Helsinki declaration were observed.

CHAPTER FOUR: FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter outlines the findings based on the specific objectives of the study. The findings are then discussed vis-a-viz the findings from other empirical literature.

4.2 Response rate

A total of 421 respondents who had lived in Nairobi County for at least six months were included in the survey. 305 of the 421 distributed questionnaires were totally completed and returned, yielding a response rate of 72.4%. The 'drop and pick' method of administration caused the non-response because some respondents were not present when the surveys were being picked up or had misplaced them. A response rate of 70% and higher, according to Mugenda & Mugenda (2010), is excellent for analysis and drawing conclusions. As may be seen in Table.4.1 below, the response rate that was obtained was thus suitable for analysis.

Table 4.1: Response rate

| Response | Frequency | Percentage |
|-----------------------------|------------------|-------------------|
| Questionnaires returned | 305 | 72.4% |
| Questionnaires not returned | 116 | 27.6 % |
| Total | 421 | 100 |

4.3 Socio-demographic characteristics

Table 4.2 sets out details of sample demography. In terms of demographics for these individuals, more women over the age of 30 (46%) than under 30 (31%), engaged in sex work. While most of the women (46% of them) were single, 32% and 22% of them were married, divorced, or widowed. Women with secondary education or above were more likely than those with primary education to engage in female sex

work. In terms of employment, women who were unemployed (28%), self-employed (35%), and both formal and informal employed (37%) were more involved in sex. Two or less children made up 50% of the women who worked in sex, followed by three children and women without children, who made up 12% of the total.

Table 4.2 Socio-demographic characteristics

| Variable | Category | Frequency | Proportion | Coding |
|------------------------|----------------|-----------|------------|----------------------------|
| Age (years) | 15-19years | 24 | 8% | 30yrs and below |
| | 25-29years | 70 | 23% | |
| | 30-34years | 65 | 21% | 30years, above |
| | 35-39years | 75 | 25% | |
| | 40 years above | 27 | 9% | |
| Marital status | Single | 140 | 46% | Single |
| | Married | 100 | 32% | Married |
| | Divorced | 45 | 15% | |
| | Widowed | 20 | 7% | |
| Education level | Below primary | 24 | 7% | Primary and below |
| | Primary | 70 | 23% | |
| | Secondary | 116 | 38% | Secondary |
| | Post-secondary | 95 | 32% | Post-secondary |
| Employment | Formal | 86 | 28% | Formal/informal employment |
| | Informal | 28 | 9% | |
| | Self employed | 106 | 35% | Self employed |
| | Un employed | 85 | 28% | unemployed |
| No of children | None | | 12% | None |
| | 1 | | 28% | 2 children and below |
| | 2 | | 22% | |
| | 3 above | | 38% | 3 and above |
| TOTALS | | 305 | 100% | |

4.4 Level of knowledge on sexual reproductive health services

4.4.1 Prior knowledge of sexual reproductive health services

From the results, it is evident that most of the Female sex workers had heard about sexual reproductive health services as shown by 72% who indicated that they were informed against 28% who had no clue about sexual reproductive health.

4.4.2 Where they sought health services

The researcher asked the FSWs to specify where they typically looked for reproductive health services in order to gauge the accessibility of those services. The majority of respondents preferred to get sexual health reproductive services from Sex Workers Outreach Program (SWOP) clinics (25.57%), followed by health centers (18.08%), when given a list of various health facilities as shown below. Similar to this, a sizeable fraction (17.7%) went to pharmacies, while only 15.74% and 15.75% went to private clinics and state hospitals, respectively, and 8.20 sought assistance from NGOs. The following table 4.3 displays this.

Table 4.3: Where do you seek Health Services

| | Frequency | Percentage |
|------------------|------------------|-------------------|
| SWOP Clinics | 78 | 25.57% |
| Private Clinics | 48 | 15.74% |
| NGOs initiatives | 25 | 8.20% |
| Health Centers | 55 | 18.03% |
| Public hospitals | 45 | 14.75% |
| Chemists | 54 | 17.70% |
| Total | 305 | 100% |

4.4.3 Affordability of SRHS

Further, respondents were asked to rate the affordability of sexual health and reproductive services, and the results are shown in table 4.4 below. According to the findings, 37% of respondents said that SRHs were affordable, 30% said they were somewhat affordable, 13% said they were not affordable, and 8% had no idea if the services were affordable or not.

Table 4.4: Affordability

| Affordability | Frequency | Percentage |
|----------------------|------------------|-------------------|
| Very affordable | 37 | 12% |
| Affordable | 113 | 37% |
| Slightly affordable | 92 | 30% |
| Not affordable | 39 | 13% |
| Don't know | 24 | 8% |
| Total | 305 | 100% |

4.4.4 Signs and symptoms of sexually transmitted infections

The respondents were also asked to check the box next to the most typical STI symptom and indication from the list shown in table 4.5 below. The most prevalent symptom was stated as an offensive watery discharge (32.8%), followed by abdominal pains (20%), itching and blisters in the vaginal area (28.8%), and bleeding after intercourse (18%).

Table 4.5 Signs and Symptoms of sexually transmitted infections

| Affordability | Frequency | Percentage |
|---------------------------------------|------------------|-------------------|
| Offensive watery discharge | 100 | 32.8% |
| Abdominal pains | 61 | 20% |
| Bleeding after intercourse | 56 | 18.4% |
| Itching and Sores in the Genital area | 88 | 28.8% |
| Total | 305 | 100% |

4.4.5 Prevention of Sexually Transmitted Infections

The study also sought to identify the preventative measures taken by FSWs to avoid contracting STIs. When questioned about any potential methods for preventing STIs, the majority of respondents stated using condoms (62.3%), staying away from many sexual partners (6.9%), having safe sex (7.5%), and knowing your partner by having a

STI test done before any sexual contact (23.3%). The outcomes are displayed in table 4.6 below.

Table 4.6 Sexually transmitted Infections

| Affordability | Frequency | Percentage |
|-----------------------------------|------------------|-------------------|
| Use of female condoms | 190 | 62.3% |
| Avoiding multiple sexual partners | 21 | 6.9% |
| Safe sex, male condoms | 23 | 7.5% |
| STIs screening and treatment | 71 | 23.3% |
| Total | 305 | 100% |

4.4.6 Have you heard about safe sex?

The study further investigated whether the respondents knew what safe sex was and results tabled below. The results in table 4.7 indicate that majority (90%) knew what sex was.

Table 4.7 Knowledge about safe sex

| | Frequency | Percentage |
|--------------|------------------|-------------------|
| Know | 275 | 90% |
| Don't know | 30 | 10% |
| Total | 305 | 100% |

4.4.7 HIV Screening

The study also looked at whether or not female sex workers underwent HIV testing. This was accomplished by assessing the respondents' consideration of HIV screening. The analysis's findings are shown in Table 4.8 below. According to the results, the majority of respondents thought HIV screening was necessary, as seen by the 50% and 30% of respondents who checked highly crucial and crucial, respectively.

However, 15% of respondents thought HIV testing was unnecessary, which may be related to the lack of proper information regarding sexual and reproductive health.

Table 4.8 HIV Screening

| Importance | Frequency | Percentage |
|-------------------|------------------|-------------------|
| Crucial | 244 | 80% |
| Not crucial | 46 | 15% |
| I don't Know | 15 | 5% |
| Total | 305 | 100% |

4.4.8 Frequency of HIV Screening

In addition to understanding the importance of HIV testing to the FSWs, the study also sought to ascertain the intervals at which they underwent screening, with the results being presented below. Majority of respondents (45%) were found to have their HIV tested every three months as recommended by WHO. The 20% of FSWs who had never had an HIV test and the 35% who did not adhere to testing recommendations were a matter of concern.

Table 4.9 Intervals for screening

| Duration | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Weekly | 9 | 3% |
| Three months | 137 | 45% |
| Annually | 98 | 32% |
| I don't Screen | 61 | 20% |
| Total | 305 | 100% |

4.4.9 Initiating ante-natal care

The next question asked respondents to select the ideal timing to begin an antenatal clinic in the event of pregnancy. This was done to determine how much people

understood about protecting both the mother and the unborn child. Results show no specific time the FSWs began attending antenatal clinic visits because the replies were dispersed among the available alternatives. However, the majority of respondents (32%) began antenatal clinics three months following conception, while 42% were unsure of the ideal timing. The results are shown in the table 4.10 as follows.

Table 4.10 Start of ante natal clinic

| Period | Frequency | Percentage |
|---------------------------|------------------|-------------------|
| Two weeks after Pregnancy | 31 | 10% |
| At three months Pregnancy | 98 | 32% |
| At six months pregnancy | 49 | 16% |
| I don't know | 128 | 42% |
| Total | 305 | 100% |

4.4.10 Unplanned Pregnancies

The study also looked at FSWs' options in the event of unwanted pregnancies. According to the findings, the majority of female sex workers (85%) obtained abortions through private doctors and over-the-counter medications in the event of an unplanned pregnancy. 10% of expectant mothers sought antenatal care, while 5% were clueless.

The result is shown in Table 4.11 below.

Table 4.11 Best course of action in case of unwanted pregnancies

| | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Abortion | 259 | 85% |
| Ante natal care | 31 | 10% |
| I don't know | 15 | 5% |
| Total | 305 | 100% |

4.5 Utilization of Sexual Reproductive Health Services

There were two categories for the utilization levels: high and low. According to the statistics below, only 46.8% of people use services for sexual and reproductive health, a low rate when compared to people who do not. According to the data, HIV screening was the reproductive service that was least used (27.5%), while contraceptives were the most often used (82.6%).

Table 4.12 Level of utilization of SRHs

| | High | | Low | |
|----------------------------------|------------|--------------|-----------|--------------|
| | Frequency | Percentage | Frequency | Percentage |
| Contraceptives | 252 | 82.6% | 53 | 17.3% |
| STI screening | 125 | 41% | 180 | 59% |
| Safe Abortion | 143 | 46.9% | 162 | 53.1% |
| HIV Screening | 84 | 27.5% | 221 | 72.5% |
| Cervical Cancer Screening | 112 | 36.7% | 193 | 63.3% |
| Average Utilization | 143 | 46.8% | | 53.2% |

4.6 Perceptions on Sexual Reproductive Health Utilization

The respondents were given a variety of statements about the use of sexual reproductive services and asked to rate them on a five-point scale thus: 1:- Strongly disagree, 2:-Disagree, 3:- Neutral, 4:- Agree, and 5:- Strongly agree. This was done in order to determine the relationship between FSWs' perceptions of sexual reproductive health and their use of sexual reproductive health services.

The data shown in Table 4.12 below make it clear that perceptions affect how female sex workers use services for sexual and reproductive health. This was supported by an average mean score of 4.22 on the attributes offered in relation to the use of SHRs. In particular, the majority of respondents indicated that condom use is important even when using other forms of contraception (M-4.66, SD- 0.873), followed by STI susceptibility (M-4.23, SD- 0.921), and last but not least, FSWs are satisfied with the services provided by contraceptives (M-4.01, SD-0.95), while the least number of respondents (M-3.98, SD- 1.001) indicated that FSWs had the highest vulnerability. The responses were clustered around the mean response, according to the 0.936 overall standard deviation. This led to the conclusion that female sex workers have a positive perception towards the utilization of SRHs as with a mean value of 4.22.

Table 4.13 Perception of Utilization of Sexual Reproductive Health Services

| Item | SD | D | N | A | SA | M | SD |
|--|-----------|----------|----------|----------|-----------|-------------|--------------|
| Female sex workers are susceptible to STIs | 3% | 10% | 10% | 40% | 6% | 4.23 | 0.921 |
| Female sex workers are highly exposed to risks | 5% | 10% | 10% | 40% | 35% | 3.98 | 1.001 |
| Condom use is important even when using other contraceptives | 20% | 8% | 13% | 20% | 40% | 4.66 | 0.873 |
| Female sex workers are satisfied with services offered by contraceptives | 0% | 14% | 10% | 48% | 20% | 4.01 | 0.948 |
| Average | | | | | | 4.22 | 0.936 |

4.7 Barriers to Seeking Sexual Reproductive Health Services

The study's fourth objective was to establish the barriers that bar FSWs from seeking sexual reproductive health services.

First, the respondents were asked to state whether they had encountered obstacles when looking for SRHS. The majority of respondents (74%) had encountered difficulties while looking for SRHS, whereas 26% had not. The following table 4.13 displays this.

Table 4.14 Have you experienced barriers when seeking SRHs

| | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Experienced | 226 | 74% |
| Not experienced | 79 | 26% |
| Total | 305 | 100% |

Additionally, the respondents were given a variety of statements regarding the difficulties in obtaining sexual health and reproductive services, with the outcomes assessed on a likert scale of 1–5: - (Strongly disagree, Disagree, Neutral, Agree, Strongly agree).

Several issues listed above, to varying degrees, make it difficult for female sex workers to access healthcare. The costs associated with seeking SHR have been a deterrent to doing so (M-4.31, 0.921); failure to seek SHRs is frequently attributed to lack of time (M-3.96, 1.00); the quality of services offered at the sexual health reproductive centers do not meet expectations (M- 4.02, 0.873); stigmatization has been a crucial factor for not seeking SHRs (4.23, 0.948); and the availability of few sexual health reproductive centers limits access to SHR services (3.72, 0.998) and failure to experience any pain has often led to not seeking SHRs (3.82, 0.87). (3.82, 0.87). The Grand mean found was 4.01, suggesting that female sex workers did indeed face a variety of obstacles when trying to receive sexual health and reproductive services. This was corroborated by the fact that, when given a rating on a

Likert Scale with five levels, the majority of respondents concur that the criteria listed made it difficult to seek out sexual and reproductive services. The challenges FSWs encounter when looking for SRHS are shown in Table 4.14 below.

Table 4.15 Barriers when seeking sexual reproductive health services

| Item | SD | D | N | A | SA | M | SD |
|--|-----|-----|-----|-----|-----|-------------|--------------|
| The costs associated with seeking SHRs have been a deterrent towards seeking the services | 8% | 24% | 15% | 40% | 13% | 4.31 | 0.921 |
| Failure to seek SHRs is often attributed to lack of time | 3% | 10% | 30% | 45% | 12% | 3.96 | 1.001 |
| The quality of services offered at the sexual health reproductive centers do not meet the expectations | 10% | 20% | 13% | 40% | 17% | 4.02 | 0.873 |
| Stigmatization has been a crucial factor for not seeking SHRs | 5% | 14% | 15% | 35% | 11% | 4.23 | 0.948 |
| The availability of few sexual health reproductive centers limits access to SHR services | 3% | 15% | 15% | 38% | 30% | 3.72 | 0.998 |
| Failure to experience any pain has often let to not seeking SHRs | 15% | 17% | 25% | 45% | 20% | 3.82 | 0.887 |
| Average | | | | | | 4.01 | 0.938 |

4.8 Hypothesis Testing

H₀₁: There exists no relationship between FSWs' socio-demographic attributes and the utilization of sexual and reproductive health services in Nairobi.

To ascertain whether social demographic factors affected the use of SRHs, a Chi-Square test of independence was run. The sections below show the results of the Chi-squared test for each independent variable;

4.8.1 Association between age group and utilization of SHRS

Age group is not related to the use of services for sexual and reproductive health, according to the null hypothesis. The findings show that the significance level is 0.01, and Pearson's Chi-Square is 82.873. Given that the p-value attained in this study is less than the critical value ($p < 0.001 < 0.05$), age group is thus related to the use of SHRs. Therefore, the null hypothesis is rejected.

Table 4.16 Association between Age group and utilization of SRHs

| | Chi Squared tests | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi Square | 82.873 ^a | 16 | .01 |
| Likelihood ratio | 83.814 | 16 | .000 |
| Linear by linear association | 2.490 | 1 | .115 |
| Number of valid cases | 305 | | |

4.8.2 Relationship between Number of children and the utilization of SRHs

The null hypothesis states that there is no correlation between the number of children and the use of SRHs. The results indicate that the p-value is 0.079 and Chi Squared value is 24.523. As a result, there is no correlation between the number of children and the use of SHRs since the $p\text{-value} = 0.079 > 0.05$, as shown by table 4.17 below, is higher than the threshold. The null hypothesis is therefore not rejected.

Table 4.17 Relationship between Number of children and the utilization of SRHs

| | Chi Squared tests | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi Squared | 24.523 ^a | 16 | .079 |
| Likelihood ratio | 28.858 | 16 | .025 |
| Linear by linear association | .257 | 1 | .612 |
| Number of valid cases | 305 | | |

4.8.3 Association between marital status and utilization of SRHs

The null hypothesis states that there is no association between utilization of Sexual and Reproductive Health services and marital status. Given that the p-value is 0.010 < 0.05 and Chi Squared value is 71.734, we reject the null hypothesis that marital status is not associated with utilization of SRHS is rejected. This shows that there is a statistically significant association between marital status and utilization of SRHs.

Table 4.18 shows the results

Table 4.18 Association between Marital Status and utilization of SRHs

| Chi Squared tests | | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi Squared | 71.734 ^a | 16 | .010 |
| Likelihood ratio | 83.835 | 16 | .000 |
| Linear by linear association | .922 | 1 | .337 |
| Number of valid cases | 305 | | |

4.8.4 Association between Employment and Utilization of SHRs

It was hypothesized that the use of sexual health and reproductive services is not influenced by the employment status. The findings demonstrated by table 4.19 below show a Chi squared value of 63.452 and a p-value of 0.123. Employment status is therefore not associated with the use of SHRs because the study's p-value of 0.123 was higher than the critical point. We therefore fail to reject the null hypothesis.

Table 4.19 Association between source of employment and utilization of SRHs

| Chi squared tests | | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi squared | 61.452 ^a | 16 | .123 |
| Likelihood ratio | 64.546 | 16 | .843 |
| Linear by linear association | 4.632 | 1 | .031 |
| Number of valid cases | 305 | | |

4.8.5 Relationship between level of education and Utilization of SHRs

The null hypothesis indicates that education level has no bearing on the use of sexual health and reproductive services. The findings demonstrate that Chi squared value is 40.760 and that the p-value is 0.01. Since the p value is smaller than the critical value ($p=0.01 < 0.05$), we concluded that the utilization of SHRs is significantly associated with the level of education. The null hypothesis that level of education has no bearing on the use of SHRs is therefore rejected. Table 4.20 illustrates the results.

4.8.6 Relationship between level of Education and Utilization of SRHs

The null hypothesis suggests that the utilization of SRHs is not associated with educational level. According to the findings, Chi squared value was 40.760, and the p-value is 0.01. Since the p-value is lower than the critical value ($p < 0.001 < 0.05$), level of education is therefore related to the utilization of SHRs as illustrated by table 4.20. As a result, we find out that there is no association between education and the utilization of SHRs.

Table 4.20 Association between Level of education and utilization of SRHs

| Chi-Square Tests | | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi squared | 40.760 ^a | 16 | .010 |
| Likelihood ratio | 46.144 | 16 | .000 |
| Linear by linear association | 1.557 | 1 | .212 |
| Number of valid cases | 305 | | |

H₀₂: There is no relationship between the knowledge and utilization of the SRHs in Nairobi.

The study's second objective sought to determine whether there was any association between female sexual workers knowledge and utilization of SRHs.

4.8.7 Relationship between Knowledge and Utilization of SRHs

The alternate hypothesis states that sex workers' knowledge of SRH is related to their use of such services, contrary to the null hypothesis. The findings show that the p-value is 0.010 and the Chi Squared value is 4047.829 respectively. Given that the p-value is less than the critical value ($p < 0.001 < 0.05$), we therefore find out that knowledge of SRH is associated with the use of SRHs. Thus, the null hypothesis that sexual workers' knowledge is not related to their use of contraceptive services is disproved. The Chi- Square test results were as presented in Table 4.21 below;

Table 4.21 Relationship between knowledge and utilization of SRHs

| Chi squared tests | | | |
|------------------------------|---------------------|----|-----------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Chi squared | 35.372 ^a | 12 | .010 |
| Likelihood ratio | 36.711 | 12 | .000 |
| Linear by linear Association | 1.761 | 1 | .184 |
| Number of valid cases | 305 | | |

4.9 Content analysis

A content analysis of the interview questions on female sex workers' access to sexual and reproductive health care was done. The results are listed below. The purpose of the interview with female sex workers was to learn more about the respondents' understanding of the idea of SRH, how often they attended the facilities, and their experiences there. The majority of respondents explained what sexual and reproductive health was by referring to family planning, fibroids, cervical cancer screening, and STI screening as health services. According to the report, the majority of sex workers sought abortions through private doctors or over-the-counter medications in the event of unintended pregnancies in order to avoid accountability or anything that would interfere with their typical sex work schedule.

Most of the FSWs were compelled to seek reproductive services by the fear of contracting modern lifestyle diseases such as cancer as illustrated by a respondent “*there are new diseases such as cervical cancer which are life threatening and so I never fail to attend any cervical cancer screening session organized through any health initiative*” It was noted that fewer respondents sought sexual reproductive services since most had not visited health facilities to seek SRHs in the past three and six months. Nonetheless, some had never sought any sexual health reproductive services. When asked about their experience when seeking SHR, provider negative attitude and discrimination towards FSWs were the most prevalent factors followed by others such as long queues, erratic supply of drugs and inadequate equipment such as x-ray, free services and dissatisfaction with level of service. A statement, “*health providers, have a negative perception towards, us female sex workers, and often consider us as dirty and immoral people who do not deserve to seek any form of*

treatment, this has created reluctance in seeking reproductive services unless the matter in hand is urgent and serious” was captured.

The Female sex workers were interviewed on the challenges experienced while engaging in sex work in relation to sexual reproductive health. The respondents cited experiences such as burst of condoms leading to unplanned pregnancies and risk of contracting STIs, failure to negotiate for safe sex, harassment from clients, self-stigma, rapes and lack of lubricants. One female worker recounted her experience with a health worker after she reported a condom burst, *“when will you stop this prostitution?”* she was asked.

The sex workers recommended that the hospital should consider offering weekends and evenings (after 5pm clinics) services to increase accessibility of sexual reproductive health services among female sex workers. They also recommended for upgrade to offer comprehensive maternal child health services in NGO programs. Other recommendations include improve of staff attitude through sensitization, protection from police harassment and protection against gender-based violence mostly physical and sexual.

The researcher also engaged key informants such as health providers working with FSWs to gain a deeper understanding and insight about the study. On the general perception of FSWs towards utilization of SRHs, the service providers indicated that the FSWs were non-committed to taking up the services with minimal uptake of services such as use STI screening. As to whether the health facilities had source registers to capture utilization of SHR by FSWs, the officials stated that they kept no specific registers for this category, but random routine MOH registers were available. There were also no coverage targets for female sex workers.

On the challenges experienced in administering sexual reproductive health services, the officers mentioned, lack of source registers and reporting tools making it difficult to track and follow sex worker's progress. Another challenge was recurrent stock of contraceptives which resulted in unwanted pregnancies. The health workers also reported heavy workloads in facilities that compromised quality counseling services to FSWs. The rogue behavior of Female sex workers such as drug and substance use were a hindrance to quality sexual reproductive health care. The ability of FSWs to hide their true identity was cited as the commonest impediment in service delivery by health care providers as reported by one, *it's in appropriate for me to ask a client whether she sells sex so that I can offer the recommended package of sexual reproductive health*"

The key informants were also asked to state how they linked with female sex workers and proxies such as through peer educators, dice and field outreach were the most common. The purpose of field outreach was to provide awareness to FSWs on the prevention of STIs and cervical cancer, counselling, health talks, handouts. A key informant reported that *"we try to take to them; we convince the ladies to stop engaging in the practice and consider venturing into other activities that are income generating to sustain their livelihoods"* some of the female sex workers listen to our suggestions but others are very rude. One female sex worker rudely answered the service provider that, *female sex work is a profession like any other and my social status is unmatched.*

4.10 Discussion of findings

Various tests performed on the study and findings are discussed and presented in this section. A combination of all the results obtained from the structured questionnaires,

interview guides, group interviews form the basis of our discussions. The findings as per objective are discussed exclusively.

4.10.1 Influence of FSWs' socio-demographic characteristics on SRHS

From the findings of this study, majority of the sex workers were young and single. Most of them had postsecondary level of education. Both those in salaried employment and the self-employed engaged in sex work almost equally. Majority of the respondents had families with one to three children.

From the findings, there is a statistically significant association between age, marital status, and level of education and the utilization of SRHs, but there was no significant association between work, number of children and utilization of SRHs.

This finding concurs with those of Oginni et al, 2015, who demonstrated that demographic variables influence the utilization of SRHs. They are also congruent to those of Ochere and Nanewortor (2011), who reported that formal education reduces chances of engaging in sex work.

4.10.2 Influence of Knowledge on SRH on utilization of SRHs by FSWs

The second objective was to establish the association between knowledge and the utilization of SRHs.

An analysis of frequencies demonstrated using frequencies and percentages and supplemented by interview guides to provide additional details revealed that the majority of female sex workers were familiar with various sexual health reproductive services such as cervical cancer screening, STI screening, HIV screening, and attending ante-natal clinics. The findings also revealed that FSWs saw seeking sexual reproductive health services as vital, albeit most were unsure of the best time to seek

such services, such as antenatal clinics. The study also discovered that the majority of sex workers sought abortions through private doctors or over-the-counter medications in the event of unplanned pregnancies, as these could impede their normal routine.

The chi-square test of independence revealed that knowledge is associated with the use of SRHs. These results concur with those of Lim et al., (2015), that FSWs have poor knowledge of SRH, unmet demand for contraception, and a high levels of unintentional pregnancies.

The findings are consistent with those of Leung et al, 2018 that patients had basic information on the surgery they were about to undergo but no understanding of how it works, the adverse effects, or related self care. They found out that handling the consequences of an intervention on a patient is dependent on the patient's understanding of the same.

The results concur with those of Yao, Murray, and Agadjanian (2013), which found that targeted interventions on a specific group such as the youth can result in better health outcomes.

4.10.3 Perception and utilization of Sexual and Reproductive Health Services

The findings of descriptive statistics revealed that condom use was crucial even when other contraceptives were used. This is because, while contraception may protect against unwanted pregnancies, sex workers are at a higher risk of developing STIs and other illnesses. Female sex workers were also shown to be more vulnerable to STIs, according to the findings. Contact with several sexual partners is connected to this. Similarly, the results demonstrate that Female sex workers were satisfied with the services provided by contraception, while respondents felt that those Female sex workers were highly vulnerable.

Descriptive statistics findings showed that condom use was important even when using other contraceptives. This is because the use of contraceptives may protect one against unplanned pregnancies but the sex workers stand high chances of contracting STIs and other conditions. The results also showed that Female sex workers were more susceptible to STIs. This is attributed to contact with multiple sexual partners. Similarly, the results show that Female sex workers were satisfied with services offered by contraceptives while the respondents indicated that those Female sex workers were highly exposed to risk.

The descriptive findings were supported by qualitative information obtained through interview guides, which can be summarized as follows: on the perception of FSWs toward utilization of SRHs, service providers indicated that the FSWs were uncommitted to taking up the services, with minimal uptake of services such as STI screening. The findings also reveal that accessing sexual reproductive health services such as contraception, coil services, or condoms by female sex workers is associated with immorality, thereby stigmatizing sex workers who seek the services.

The results concur with the findings of Legar et al. 2012, that diverse techniques to sharing decisions with patients should be examined since they are more likely to stick to the actions in the decisions they perceive to be best for them. The study emphasized the need of health personnel always questioning and exploring patients' perspectives, and that consumption of reproductive health care should use the notion for greater commodity uptake.

Furthermore, findings by Lutnick and Cohan's (2009) concludes that higher risk is caused by a combination of conduct and marginalization that prevents access to

prevention and care services. This is because female sex is seen as a sin, causing many people to avoid obtaining the service.

4.10.4 Barriers to Assessing Sexual Reproductive Health Services

The descriptive statistics findings show that access to healthcare by Female sex workers is hampered by the factors stated to different magnitudes. Delays in seeking and obtaining diagnosis and treatment compromises prognosis (WHO 2011). The costs associated with seeking SHRs were found to be a major deterrent towards seeking sexual reproductive health services. The respondents also reported that to some extent, failure to seek SHRs is often attributed to lack of time. The possible explanation for this was that Female sex work happens at night when most health service centers are closed. The respondents further mentioned dissatisfaction with the quality of services offered at the sexual health reproductive centers. This was mainly due to discrimination or lack of adequate facilities and equipment. Stigmatization was cited as a crucial factor for not seeking SHRs.

A sex worker claimed that the medical staff restricted their visits to the clinics because they thought they were filthy and immoral. This result was found to be consistent with Scorgie, et al (2013) conclusion that discrimination against sex workers is a serious issue in most nations where the practice is forbidden.

A barrier to accessing SHR services was also highlighted as the dearth of sexual health and reproductive facilities. Another issue was a lack of supplies, particularly for family planning tools and condoms (female). Additionally, the health professionals reported a heavy workload that exceeded the capability of the medical institutions. The results are consistent with research by Tafese, Woldie, and Megerssa on the superiority of SRH care facilities in Jimma region and Southwest Ethiopia

(2013). The study found that the quality of SRHs was hampered by a lack of the requisite medical equipment, trained personnel, and information education and communication materials (IEC) exhibited at contraception clinics. The study found that in order to ensure the quality of care to be assured, necessary resources must be present.

The results were also in line with another study conducted in Canada by Cameron, Plazas, Salas, and Hungler (2014) to address accessibility barriers to health care services that concluded that humiliation, attitude of the nurses, discrimination and stigma were the barriers.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter a summary of the research findings, conclusions and recommendations are provided based on the study objectives. The chapter also gives suggestions for further studies on utilization of sexual health reproductive services in Kenya.

5.2 Summary of findings

Factors that influence the utilization of SRHs among FSWs in Nairobi were examined. The assessment was done against three independent variables namely social demographic characteristics, knowledge on SHRs and Perception towards SRHs.

5.2.1 Influence of Socio-demographic characteristics on Utilization of SHRS

The study found that women from all age groups engage in commercial sex. Majority of the women engaging in the practice were those between the age groups 25-30 and 30-35 years. The results showed that women both in employment and those involved in other income earning opportunities engaged in Female sex work. Similarly, the level of education was not significantly associated with the likelihood of engagement in female sex work. Most Female sex workers were found to be mothers as most had between one and more than three children. A very insignificant percentage did not have children. The study also found that both the married and single dominated the industry suggesting that this was purely a commercial exercise and its indulgence was not for leisure purposes. From the chi-square results, age group, education level and marital status had a significant relationship on the utilization of SRHs while there was no statistically significant association between employment and number of children and the uptake of SRHs. Chi Squared test of independence showed association

between socio-demographic characteristics and use of sexual SRHs reveal produced significant associations between age, marital status and education and utilization of SRHs while there was no statistically significant relationship between source of employment and number of children on use of sexual reproductive health services.

5.2.2 Influence of knowledge on SRH on the utilization of SRHs

The study found that most of the female sex workers had knowledge about various sexual health reproductive services such as cervical cancer screening, STI screening, HIV screening and attending ante-natal clinics. The results further show that the FSWs considered the seeking of sexual reproductive health services as important although most were not certain on the right time to seek the medical services for instance ante-natal clinics. The study further established that majority of the sex workers sought abortion via private doctors or over the counter drugs in case of unwanted pregnancies to avoid child responsibilities.

5.2.3 To Determine the Perceptions of FSWs on the utilization of SRHS

The findings on the effect of FSWs perception towards seeking SHRs included factors such as female sex workers are at more risk of contracting sexually transmitted infections. Although all women can contract STIs, the risk among the Female sex workers was higher due to the level of exposure. The study also found that most of the FSWs assumed that the use of condoms once on contraceptives was not vital which was misleading as contraceptives only safeguard against pregnancy and not sexually transmitted infections. The results further showed that the seeking of sexual reproductive health services such as contraceptives, coil services or condoms by the female sex workers was linked with immorality thus stigmatizing the sex workers from seeking the services.

5.2.4 Barriers to seeking sexual and reproductive health Services

Among the barriers identified were service provider attitude towards Female sex workers.

Factors such as long queues at the health facilities, stock outs and lack or inadequate specialized equipment for administering health services at facilities were also found to contribute to inaccessibility or poor SRHs seeking behaviors among FSWs. Most Female sex workers also cited unfriendly working hours as a key impediment to seeking the services as most work at night and sleep during the day. The study also found that lack of specific policies and awareness programs on sexual reproductive health that target FSWs was a barrier. Finally, non-disclosure of their work when seeking sexual reproductive health services prevented sex workers from getting comprehensive treatment and attention.

5.3 Conclusions

Based on the study objectives, the following conclusions were drawn from the study findings.

1. Socio-demographic characteristics such as age, education and marital status have a statistically significantly associated with the utilization of sexual reproductive health services.
2. The study also concludes that there is a statistically significant relationship between knowledge and use of SRHs. The study outlined that the utilization of various SRHs was associated with knowledge and perception on importance of the service.
3. Further, the study concludes that service providers perceive that the FSWs were non-committed to taking up the services with minimal uptake of services

such as use of condoms and STI screening. The results further show that sexual reproductive health services such as contraceptives, coil services or condoms by the female sex workers was linked with immorality thus stigmatizing the sex workers against seeking the services.

4. Last but not least, it was noted that FSWs largely depend on contraceptives impartially which makes them to overlook other important sexual reproductive health services

Sex work was attributed to behavioral factors such as believe that they were at more risk to contracting STI. This is because engagement in commercial sex is perceived as a sin forcing many to avoid seeking the service due to the associated stigma

Finally, the study established that access to SRHs by FSWs was limited to a large extent by the identified barriers. The barriers emanated from two categories. “The first set constituted those that prevented FSWs from accessing SRHs such as lack of time and failure to appreciate the need for seeking the services and attributed to their experience at the health centers such as negative attitude and discrimination by health workers and unaffordable costs of seeking the services”. The utilization rate of 46.8% is low as compared to the 100% of best attainable service enshrined in the constitution of Kenya 2010 as a right to all.

5.4 Recommendations

The following recommendations are suggested based on the study findings and conclusions.

1. The Nairobi City County department of Health services should conduct targeted Health education on SRHs for FSWs in Nairobi County health facilities and identified community events like dialogue day and outreaches.

2. The reproductive health section should sensitize health care workers on how to provide friendly SRHs to FSWs to reduce stigma and increase uptake.
3. The health department of the County should implement strategies for increasing access to SRHs by integrating them with other health services.

5.5 Suggestions for further Research

The following suggestions for further research were proposed.

1. The study was carried out in Nairobi County. The same study could be replicated in other parts of Kenya so as to make more robust conclusions about utilization of SRHs by FSWs in Kenya.
2. The scope of the study could also be extended to include other hard to reach populations such as male sex workers and drug users.

BIBLIOGRAPHY

- Ayehu, A., Kassaw, T., & Hailu, G. (2016). Level of young people sexual and reproductive health service utilization and its associated factors among young people in Awabel District, Northwest Ethiopia. *Plos one*, *11*(3), e0151613.
- Cameron, B. L., Plazas, M. D. P. C., Salas, A. S., Bearskin, R. L. B., & Hungler, K. (2014). Understanding inequalities in access to health care services for aboriginal people: a call for nursing action. *Advances in Nursing Science*, *37*(3), E1-E16.
- Christiansen, P., Cole, J. C., Goudie, A. J., & Field, M. (2012). Components of behavioural impulsivity and automatic cue approach predict unique variance in hazardous drinking. *Psychopharmacology*, *219*(2), 501-510.
- Constitution of Kenya Article 43 (1)
- Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods* (10th ed.). Boston: McGraw-Hill.
- Coy, M. e. (2016). *Prostitution, harm and gender inequality: Theory, research and policy*. Routledge.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, *16*(3), 297-334
- Fisher, L. D. (1998). Self-designing clinical trials. *Statistics in medicine*, *17*(14), 1551-1562.
- Kaufman, J. C., Cole, J. C., & Baer, , J. (2009). The construct of creativity: Structural model for Self-Reported creativity ratings. *The Journal of Creative Behavior*, ., *43*(2), 119-134.
- Kipkebut, D. J. (2010). Human Resource Management Practices and Organizational Commitment in Higher Educational Institutions: A Kenyan Case. *IUP Journal of Organizational Behavior*, *9*.
- Kurtz, S., Surratt, H., Kiley, M., & . and Inciardi, J. (2005). Barriers to health and social services for street-based sex workers. . *Journal of health care for the poor and underserved* *16*, no. 2, 345-361.

- Lafort, Y., Greener, R., Roy, A., L., Ombidi, W., . . . Reza-Paul, S. a. (2017). Sexual and reproductive health services utilization by female sex workers is context-specific: results from a cross-sectional survey in India, Kenya, Mozambique and South Africa. *Reproductive Health* 14(1), 13.
- Leung, R., Malliaropoulos, N., Korakakis, V., & Padhiar, N. (2018). What are patients' knowledge, expectation and experience of radial extracorporeal shockwave therapy for the treatment of their tendinopathies? A qualitative study. *Journal of foot and ankle research*, 11(1), 1-9.
- Lim, M., Zhang, X., Kennedy, E., Li, Y., Yang, Y., Li, L., . . . and Luchters, S. (2015, January 27). Sexual and reproductive health knowledge, contraception uptake, and factors associated with unmet need for modern contraception among adolescent female sex workers in China. *PloS one*, 10(1), p.e0115435.
- Lutnick, A., & Cohan, D. (2009). Criminalization, legalization or decriminalization of sex work: what female sex workers say in San Francisco, USA. *Reproductive Health Matters*, 17(34), 38-46.
- Ministry of Health. (2012). Kenya Health Policy 2012-2030: Nairobi. Ministry of Health
- Ministry of Health: Kenya Aids Strategic Framework (KAF 2015-2018).
- Mugenda, A. (2008). Social Science Research, Theory and Principles. Nairobi: Applied Research and Training Services
- Mugenda, A., & Mugenda, O. (2003). Research Methods: Quantitative and Qualitative approaches NAIROBI: African Center for Technology Studies (ACTS).
- Mugenda, O. M., & Mugenda, G. A.(2003). *Research methods*.
- National AIDS and STI Control Programme (NASCO). (2013). *Kenya AIDS Indicator Survey 2012: Preliminary Report NASCO*. Nairobi, Kenya.
- Njeri., N. C. (2016). *Barriers faced by female sex workers in seeking Healthcare at Public Health facilities in mlolongo ward, athi-river sub-county*. University of Nairobi: PhD diss.

- Nyagero, J., Wangila, S., Kutai, V., & Olango, S. (2012). Behaviour change and associated factors among female sex workers in Kenya. . *The Pan African Medical Journal*, 13, 16.
- Nyblade, L., Mbote, D., Barker, C., Morla, J., Mwai, D., Oneko, T., . . . Njugana, S. (2015). Impact of stigma on utilization of health services among sex workers in Kenya. *Health Policy Project*.
- Ochere, L., & Nanewortor, F. (2011). *the influence of socio-economic status and level of education on the practice of commercial sex (female prostitution) in ghana*.
- Odek, W. O., Githuka, G. N., & Avery, L. N. (2014, Mar 3). *Estimating the size of the female sex worker population in Kenya to inform HIV prevention programming*. 9(3):e89180.
- Odek, W. O., Githuka, G. N., Avey, L., Njoroge, P. K., Kasonde, L., Gorgens, M., . . . Isac, S. a. (2014, Mar 3). Estimating the size of the female sex worker population in Kenya to inform HIV prevention programming. *PloS one*, e89180.
- Oginni, A. B., Ahonsi, B. A., & Adebajo, S. (2015). Trend and determinants of unmet need for family planning services among currently married women and sexually active unmarried women aged 15-49 in Nigeria (2003—2013). *African Population Studies*, 29(1), 1483-1499.
- Omondi, ., R., Omondi, O., Rose,, & C. R. (2017). *Tourism Management* 58. *Sex tourism: romantic safaris, prayers and witchcraft at the Kenyan coast*, 217-227.
- Rosen, G. (2015). *A history of public health*. JHU Press.
- Scorgie, F., Nakato, D., Harper, E., Richter, M., Maseko, S., Nare, P., . . . Chersich, M. (2013). We are despised in the hospitals': sex workers' experiences of accessing health care in four African countries. . *Culture, health & sexuality*, 450-465.
- Shannon, K. S.-P. (2015). Global epidemiology of HIV among female sex workers. *influence of structural determinants The Lancet Volume 385, Issue 9962, ., pp. 55-71*.
- Singer, M. (1993). Knowledge for use: anthropology and community-centered substance abuse research. *Social Science & Medicine*, 37(1), 15-25.

- Tafese, F., Woldie, M., & Megerssa, B. (2013). Quality of family planning services in primary health centers of Jimma Zone, Southwest Ethiopia. *Ethiopian journal of health sciences*, 23(3), 245-254.
- UNAIDS, U. (2010). UNIFEM (2004). . (n.d.). Confronting the crisis. *Women and HIV/AIDS*.
- United Nations. Department for Economic, Social Information, & Policy Analysis. (1995). *Population and Development: Programme of Action Adopted at the International Conference on Population and Development, Cairo, 5-13 September 1994* (Vol. 1). New York: United Nations, Department for Economic and Social Information and Policy Analysis.
- Wahed, T., Alam, A., Sultana, S., R. M., Alam, N., Martens, M., & and Somrongthong, R. (2017, July 31). Barriers to sexual and reproductive healthcare services as experienced by female sex workers and service providers in Dhaka city, Bangladesh. *PloS one*, e0182249.
- World Health Organization. (2016). "Adolescent contraceptive use: data from the Kenya demographic and health survey (KDHS), 2014." In *Adolescent contraceptive use: data from the Kenya demographic and health survey (KDHS)*.
- Yao, J., Murray, A. T., & Agadjanian, V. (2013). A geographical perspective on access to sexual and reproductive health care for women in rural Africa. *Social Science & Medicine*, 96, 60-68.
- Ziraba, A., Izugbara, C., Levandowski, B., Gebreselassie, H., Mutua, M., Mohamed, S., . . . and Kimani-Murage, E. (2015, Dec 15). Unsafe abortion in Kenya: a cross-sectional study of abortion complication severity and associated factors. *BMC pregnancy and childbirth.*, 34.

APPENDICES

Appendix I: Questionnaire

DATE OF INTERVIEW.....

INSTRUCTIONS:

My name is Beatrice Bwabi a student at Kenyatta University taking Masters in Reproductive Health at School of Public Health and Applied Human Sciences. This project is partial fulfilment of course requirement and also a guide to improvement of Sexual Reproductive Health services at Embakasi East. Indication of your name on this form is optional.

Whatever information given as per this form shall be handled confidentially and used only for the study purpose. There are two parts of questions to be completed. SECTION (A) Deals with questions about you while SECTION (B) contains questions Related to sexual Reproductive Health Please try to answer all the questions to the best way that you can.

SECTION A: SOCIO DEMOGRAPHIC INFORMATION (Tick where applicable)

Q1. Which is your age group?

| | | | | | | | | | | | |
|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|
| 15-18 years | | 19-24 years | | 25-30 years | | 31-35 years | | 36-44 years | | 45-49 years | |
|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|

Q2. What is your *marital status*?

| | | | | | | | |
|--------|--|---------|--|---------|--|----------|--|
| Single | | Married | | Widowed | | Divorced | |
|--------|--|---------|--|---------|--|----------|--|

Q3. How do you earn your living?

| | | | | | | | |
|----------------------|--|------------------------|--|---------------------|--|------------|--|
| Formal employment | | Informal employment | | Self- employment | | Unemployed | |
|----------------------|--|------------------------|--|---------------------|--|------------|--|

Q4. How many living children do you have?

| | | | | | | | |
|-----|--|-----|--|--------------------|--|------|--|
| One | | Two | | Three and above | | None | |
|-----|--|-----|--|--------------------|--|------|--|

Q5. What is your highest level of education?

| | | | | | | | |
|---------------|--|---------|--|-----------|--|----------------|--|
| Below primary | | Primary | | Secondary | | Post-secondary | |
|---------------|--|---------|--|-----------|--|----------------|--|

SECTION B: LEVEL OF KNOWLEDGE ON SEXUAL REPRODUCTIVE HEALTH SERVICES (Tick where applicable)

Q6. Have you ever heard about Sexual Reproductive Health services?

| | | | |
|-----|--|----|--|
| Yes | | No | |
|-----|--|----|--|

Q7. Which types of sexual reproductive health services are you familiar with?

| | |
|-------|------|
| (i) | (ii) |
| (iii) | (iv) |
| (v) | (vi) |

Q8. Are the services mentioned above available to you?

| | | | |
|---------------------|--|---------------|--|
| Always available | | Not available | |
| Available | | I don't know | |
| Partially available | | | |
| | | | |

b). Are the SRHs cost affordable?

| | | | |
|-----------------|--|---------------------|--|
| Very affordable | | Slightly affordable | |
| affordable | | Not affordable | |
| Don't know | | | |

Q9. Which of the following are signs and symptoms of sexually transmitted infections?

| | | | |
|----------------------------|--|-----------------------|--|
| Bleeding after intercourse | | tching | |
| Abdominal pains | | No signs and symptoms | |
| Offensive watery discharge | | I don't know | |

Q10. Is it possible to prevent sexually transmitted infections?

| | | | |
|-----|--|----|--|
| Yes | | No | |
|-----|--|----|--|

Q11. Have you ever heard about safe sex?

| | | | |
|-----|--|----|--|
| Yes | | No | |
|-----|--|----|--|

(b) How important is safe sex to you?

| | |
|----------------|--------------------------|
| Very important | <input type="checkbox"/> |
| Important | <input type="checkbox"/> |
| Not important | <input type="checkbox"/> |

Q12. How often do you screen for HIV?

| | | | | | | | |
|------------|--|--------------------|--|------------|--|----------------|--|
| Every week | | Every three months | | Every year | | I don't screen | |
|------------|--|--------------------|--|------------|--|----------------|--|

Q13. Is HIV screening crucial?

| | |
|--------------|--|
| Very crucial | |
| Just crucial | |
| Not crucial | |

Q14. When should one start ante natal clinic?

| | | | |
|---------------------------|--|--------------------------|--|
| At three months pregnancy | | Immediately she realizes | |
| At six month | | ny time in the pregnancy | |
| I don't know | | | |

Q15. In case of an unwanted pregnancy, what would be the best option?

| | | | | | |
|----------|--|-----------------|--|--------------|--|
| Abortion | | Ante natal care | | I don't know | |
|----------|--|-----------------|--|--------------|--|

16(b) what preference would you have in procuring an abortion?

| | | | |
|----------------|--------------------------|---------------|--------------------------|
| Private doctor | <input type="checkbox"/> | counter drugs | <input type="checkbox"/> |
| Clinic | <input type="checkbox"/> | | |
| Hospital | <input type="checkbox"/> | | |

Q17. What times would contraceptives be applicable? (Tick all applicable)

| | | | |
|----------------------------|--------------------------|--|--------------------------|
| Immediately after delivery | <input type="checkbox"/> | All times so long as a woman is not pregnant | <input type="checkbox"/> |
| Six weeks after delivery | <input type="checkbox"/> | After sexual intercourse | <input type="checkbox"/> |
| After abortion | <input type="checkbox"/> | I don't know | <input type="checkbox"/> |
| Others (specify) | | | |

SECTION C: PERCEPTIONS ON SEXUAL REPRODUCTIVE HEALTH SERVICE

Please indicate the extent to which you agree with the following statements on the perception towards the utilization of reproductive services in a five point scale of; 1- Strongly Disagree, 2-Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

| Item | SD | D | N | A | SA |
|--|----|---|---|---|----|
| Female sex workers are susceptible to STIs | | | | | |
| Female sex workers are highly exposed to risks | | | | | |
| Condom use is important even when using other contraceptives | | | | | |
| Female sex workers are satisfied with services offered by contraceptives | | | | | |

SECTION D: BARRIERS WHEN SEEKING SEXUAL REPRODUCTIVE HEALTH SERVICES

Please indicate the extent to which you agree with the following statements on the challenges experienced in a bid to secure sexual health reproductive services in a five point Likert of scale of 1-Strongly disagree, 2- Disagree, 3-Moderate, 4- Agree, 5- Strongly Agree .

| Item | SD | D | N | A | SA |
|--|----|---|---|---|----|
| The costs associated with seeking SHRs have been a deterrent towards seeking the services | | | | | |
| Failure to seek SHRs is often attributed to lack of time | | | | | |
| The quality of services offered at the sexual health reproductive centers do not meet the expectations | | | | | |
| Stigmatization has been a crucial factor for not seeking SHRs | | | | | |
| The availability of few sexual health reproductive centers limits access to SHR services | | | | | |
| Failure to experience any pain has often let to not seeking SHRs | | | | | |

SECTION E: UTILIZATION OF SEXUAL REPRODUCTIVE HEALTH SERVICES

Indicate your opinion on the level of utilization of sexual health reproductive services by Female sex workers in Nairobi County. Use the rating criteria: 1-Strongly disagree, 2- Disagree, 3-Neutral, 4-Agree, 5- Strongly agree.

| | SD | D | N | A | SA |
|--|----|---|---|---|----|
| The use of contraceptives is recommended to protect against unwanted pregnancies and other complications | | | | | |
| I frequently go for STI screening | | | | | |
| I seek safe abortion | | | | | |
| I often undertake HIV screening | | | | | |
| I have undergone cervical cancer screening in the last twelve months | | | | | |

THANK YOU FOR TAKING TIME TO FILL THIS INFORMATION.

Appendix II: Key Informant Interview Guide

1. General perception of Female sex workers utilization of sexual Reproductive Health

Do you have source register that captures FSWs utilization of SRHs?

What is the coverage?

Are there set policies or guidelines to govern SRHs for FSWs?

In your opinion do FSWs need SRHs SERVICES?

Which are the most utilized services in SRHs?

How do you link up to FSWs?

Are the SRHs affordable to FSWs?

Which type of awareness are provided on SRHs to FSWs

Share any challenges experienced by FSWs while seeking SRHs in our facilit

Appendix III: Group Interview Guide

VENUE:

DATE:

NO OF PARTICIPANTS:

What do you understand by the term Sexual Reproductive Health Services?

When did you last visit the health facility to seek SRHs?

What is your experience while seeking the SRHs?

What experience have you had in engaging in female sex work in relation to SRH?

What would be your recommendation in improvising SRHs?

Do you have any other information to share on your experience as a female sex work?

Appendix IV: Research Authorization



KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: dean-graduate@ken.ac.ke

Website: www.ken.ac.ke

P.O. Box 43844, 00100

NAIROBI, KENYA

Tel. 020-8704150

Our Ref: Q139/CTY/PT/37421/2016

DATE: 30th August, 2015

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR MS. BEATRICE NANGEKHE BWABI --
REG. NO. Q139/CTY/37421/2016**

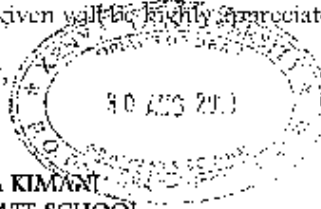
I write to introduce Ms. Beatrice Nangekhe Bwabi who is a Postgraduate Student of this University. She is registered for M.P.H. degree programme in the Department of Population, Reproductive Health & Community Resource Management.

Ms. Bwabi intends to conduct research for a M.P.H. thesis Proposal entitled, "Utilization and Health Facility Barriers of Sexual and Reproductive Health Services among Female Sex Workers in Nairobi City County, Kenya."

Any assistance given will be highly appreciated.

Yours faithfully,


PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL



Appendix V: Research Authorizations: Nairobi County

NAIROBI CITY COUNTY

Telephone 020 344194
web: www.nairobi.go.ke



City Hall,
P. O. Box 30075-00100,
Nairobi,
KENYA.

COUNTY HEALTH SERVICES

REF: CHS/1/13/ (2) - 020

Ms. BEATRICE NANGEKHE BWABI Reg No. Q139/CTY/37421/2016
KENYATTA UNIVERSITY
P.O BOX 43844
NAIROBI.

DATE: 9TH JANUARY, 2020.

RE: RESEARCH AUTHORIZATION

Reference is made to a letter from the Director Human Resource Management
Ref. NCC/HRD/HRM/017/2020 dated 9th January, 2020.

Authority is hereby granted to you to carry a research on "**Utilization and Health Facility barriers of sexual and reproductive Health Services among female sex workers in Nairobi City County, Kenya.**"

Please note that your research will run for one – month w.e.f 10th January, 2020.

During the course of your research, you will be expected to adhere to the rules and regulations governing the Nairobi City County.

During your study there will be no costs devolving on the County.

That you undertake to indemnify the County against any claims that may arise from your data collection.

By a copy of this letter, the Sub – County MOH's and HAO's for – Embakasi East, Embakasi West, Kamukunji and Starehe are requested to accord you the necessary assistance.

DAN OMIDO
FOR: CHIEF ADMINISTRATIVE OFFICER – (CHS)

Cc: - Relevant MOH's
Relevant HAO's





Republic of Kenya
MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegram: "SCHOOLING", Nairobi
 Telephone: Nairobi 020 2453699
 Email: csenairobi@gmail.com
csenairobi@gmail.com

When replying please quote

Ref: **RCE/NRB/RESEARCH/1/64 VOL. 1**

REGIONAL DIRECTOR OF EDUCATION
 NAIROBI REGION
 SYDNEY HOUSE
 P.O. Box 74629 - 00209
 NAIROBI

DATE: **06TH January, 2020**

Beatrice Bwabi
 Kenyatta University

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on "Utilization and Health facility barriers of sexual and reproductive health services among female sex workers".

This office has no objection and authority is hereby granted for a period ending **18th December, 2020** as indicated in the request letter.




JAMES KIMOTHO
 FOR: REGIONAL DIRECTOR OF EDUCATION
 NAIROBI

c.c

Director General/CEO
 National Commission for Science, Technology and Innovation
 NAIROBI



NAIROBI CITY COUNTY

Telephone: +254 20 2221349
 Web: www.nairobi.go.ke



City Hall
 P. o. box 30075-00100
 Nairobi
 Kenya

DEVOLUTION AND PUBLIC SERVICE MANAGEMENT

Ref: **NCC/HRD/HRM/017/2020**

Date: **9th January 2020**

Ms Beatrice Nangekhe Bwabi Reg No: No. Q139/CTV/37421/2016
 Kenyatta University
 P.O.BOX 43844
 Nairobi

RE: RESEARCH AUTHORIZATION

Reference is hereby made to your application letter dated 30th August 2019, on the above subject matter;

The Nairobi City County has approved your request subject to the following:

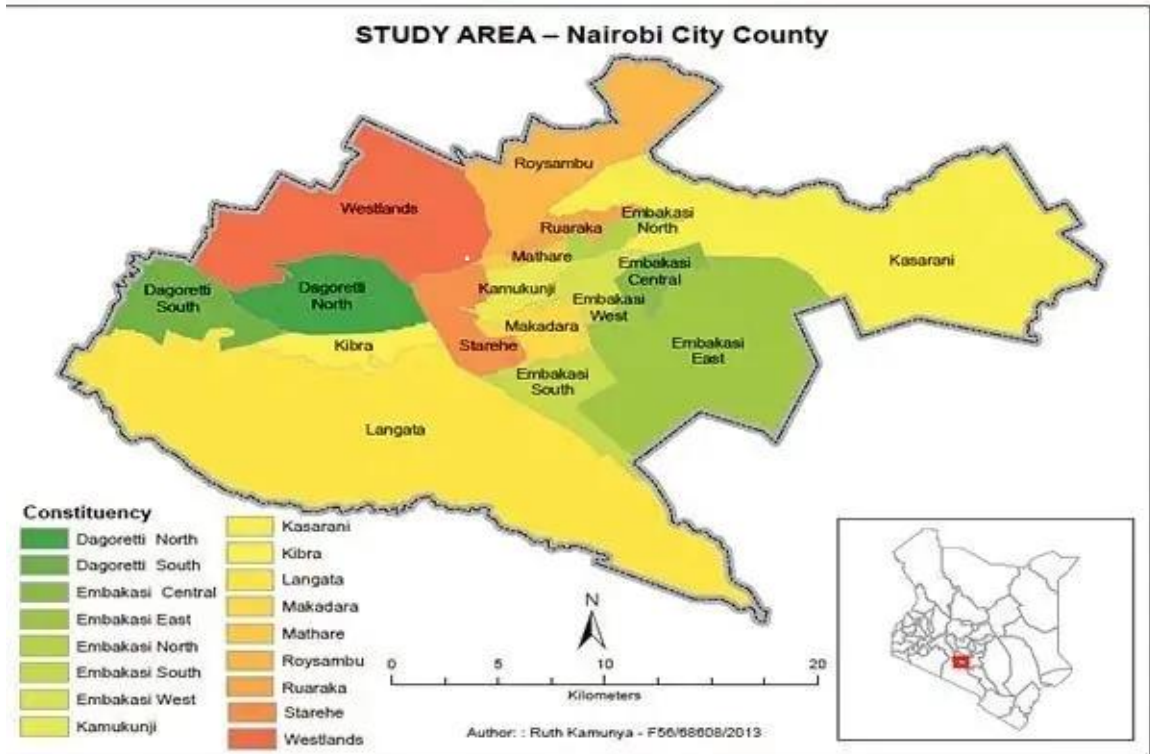
1. The period of research will be One (1) month with effects from 10th January 2020.
2. You will be allowed to information in specific areas of study at Health Services 'Embakasi east.
3. That during your research, there will be no costs developing on the County.
4. The research will be used for academic purposes only.
5. That you undertake to indemnify the County against any claim that may arise from your research study.
6. You are not authorized to release any information without vetting and authority from this office.
7. You are expected to submit to undersigned copy of the final research document for the county's retention (within one week after research).

"Utilization and Health Facility Barriers of Sexual and Reproductive Health Services among Female Sex Workers in Nairobi City County, Kenya."





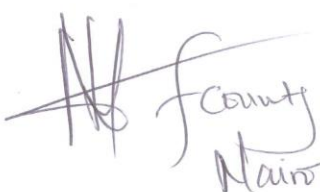

By a copy of this letter, the **Chief Administrative Officers Health Sector** is requested to accord you the necessary assistance.


CHARLES CHOI
 FOR: DIRECTOR HUMAN RESOURCE DEVELOPMENT

Appendix VI: Map of Nairobi County



Appendix VII: Research Permit

| | |
|---|--|
|  REPUBLIC OF KENYA |  NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION |
| RefNo: 792205 | Date of Issue: 18/December/2019 |
| RESEARCH LICENSE | |
|  | |
| This is to Certify that Ms. BEATRICE BWABI of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: UTILIZATION AND HEALTH FACILITY BARRIERS OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG FEMALE SEX WORKERS IN NAIROBI CITY COUNTY, KENYA for the period ending : 18/December/2020. | |
| License No: NACOSTI/P/19/2702 | |
| 792205 Applicant Identification Number |  Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION |
|  County Commissioner Nairobi | COUNTY COMMISSIONER NAIROBI COUNTY P. O. Box 30124-00100, NBI TEL: 341666 Verification QR Code |
| <small>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</small> | |
|  | |