

SEXUAL PRACTICES, THEIR INFLUENCERS AND UTILIZATION OF HIV
SERVICES AMONG FEMALE SEX WORKERS IN MOMBASA COUNTY, KENYA

ROBERT ABUGA MOKINU

A THESIS SUBMITTED TO THE SCHOOL OF APPLIED AND HEALTH SCIENCES
IN THE DEPARTMENT OF ENVIRONMENTAL AND HEALTH SCIENCES IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
MASTER DEGREE IN PUBLIC HEALTH OF TECHNICAL UNIVERSITY OF
MOMBASA

2024

DECLARATION

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

Robert Abuga Mokinu

MPH/0025/2019

Signature.....

Date.....

This thesis has been presented with our approval as university supervisors.

Dr. Shadrack Yonge, PhD

Signature.....

Date.....

Prof. Peter Gichangi, Ph.D.

Signature.....

Date.....

DEDICATION

I dedicate this study to my daughter Sharon Kerubo Abuga, my mother Yovensia Nyaboke Mokinu and my late father Nahashon Mokinu. Daddy's encouragement "Kari motwe" (keep moving on) has taken me this high, his legacy lives.

ACKNOWLEDGMENT

I gratefully acknowledge all of the faculty members at Technical University of Mombasa department of Environmental and Health Sciences for their invaluable assistance. Dr. Shadrack Yonge and Prof. Peter Gichangi deserve special mention for their professional assistance and guidance. Your advice and technical assistance have been invaluable and inspirational to me. Finally, I would like to express my gratitude to the International Centre for Reproductive Health - Kenya (ICRH-K) for their support (accepted this study to use part of their data).

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGMENT	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS AND ACRONYMS	xii
DEFINATION OF TERMS.....	xiv
ABSTRACT.....	xv
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background Information of the Study	1
1.2 Statement of the Problem	3
1.3 Justification	4
1.4 Research Objectives	5
1.4.1 General Objective.....	5
1.4.2 Specific Objectives	5
1.5 Null Hypotheses.....	5
1.6 Significance of the Study	6
1.7 Study Scope.....	6
1.8 Study Limitations.....	6
1.9 Conceptual Framework	7

CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Global Overview.....	8
2.2 Socio-Demographic Characteristics of Female Sex Workers in Mombasa.....	9
2.2.1 Young Age and Sex Work.....	9
2.2.2 Education Level of Female Sex Workers.....	10
2.2.3 Marital Status of Female Sex Workers.....	11
2.2.4 Residence of Female Sex Workers.....	12
2.2.5 Income.....	12
2.2.6 Peer Pressure Influence.....	13
2.3 Sexual Practices Among Female Sex Workers.....	14
2.3.1 Anal Intercourse.....	14
2.3.2 Oral Sex.....	15
2.3.3 Condoms Use and Non-Use during Sex.....	16
2.3.4 Multiple Sexual Partners.....	17
2.3.5 Forced Sex Among Female Sex Workers.....	17
2.4 Alcohol Use by Female Sex Workers.....	18
2.5 Violence Against Female Sex Workers.....	19
2.5.1 Physical Violence.....	19
2.5.2 Sexual Violence.....	20
2.5.3 Psychological Violence.....	20
2.6 Utilization of HIV Services.....	20
2.6.1 HIV Testing.....	21
2.6.2 Antiretral Viral Therapy (ART) Accessibility and Usage.....	22
2.6.3 Pre-Exposure Prophylaxis (Prep) Use.....	23

2.6.4 Use of Post-Exposure Prophylaxis (PEP).....	24
CHAPTER THREE	26
MATERIALS AND METHODS	26
3.1 Data Source	26
3.2 Study Location	26
3.3 Design of the Study.....	26
3.4 Population of the Study.....	27
3.4.1 Inclusion Criteria.....	27
3.4.2 Criteria for Exclusion.....	27
3.4.3 Independent Variables	28
3.4.4 Intervening Variables	28
3.4.5 Dependent Variable.....	28
3.5 Sample Size	28
3.6 Sampling Technique.....	29
3.7 Tools for Data Collection.....	29
3.7.1 Pre-Testing of Research Instruments.....	30
3.7.2 Validity.....	30
3.7.3 Reliability	30
3.8 Procedure for Data Collection.....	30
3.9 Management and Analysis of Data.....	31
3.10 Ethical Considerations.....	32
CHAPTER FOUR.....	33
RESULTS AND DISCUSSION.....	33
4.1 Socio-Demographic Characteristics of FSWs in Mombasa County Between 2014 - 2015.....	33

4.2 Sexual Practices.....	35
4.2.1 Female Sex Workers' Behavior in Mombasa County.....	35
4.2.2 Frequency and Type of Sexual Intercourse with Partners.....	35
4.2.3 Type of Condoms used by Female Sex Workers in Mombasa County between 2014 - 2015	37
4.3 Influencers of Sexual Practices Among Female Sex Workers.....	37
4.3.1 Alcohol use and Violence Among Female Sex Workers.....	37
4.4 Utilization of HIV Services by FSWs in Mombasa County.....	40
4.4.1 Knowledge of HIV Prevention and Testing by FSWs.....	40
4.4.2 Attitudes Toward HIV Testing Among FSWs	42
4.5 Determinants of Risky Sex Practice among FSWs in Mombasa County	4.5.1
Association of FSWs Socio-Demographic Characteristics, Behaviors and	44
Frequency of Sex or Sex Type with Risky Sex Practices	44
4.5.2 Alcohol use and Violence Factors Associated with Risky Sex Practice	49
4.5.3 Knowledge HIV Prevention and Testing Factors Associated with Risky Sex Practice	52
4.5.4 Attitudes towards HIV Testing Factors Associated with Risky Sex Practices	54
4.6 Predictors of Risky Sex Practice among FSWs in Mombasa County.....	54
4.7 Discussion.....	57
4.7.1 Introduction.....	57
4.7.2 Socio-Demographic Characteristics of FSWs	57
4.7.3 Sexual Practices Among Female Sex Workers	57
4.7.4 Influencers of Sexual Practices among Female Sex Workers.....	60
4.7.5 Utilization of HIV Services.....	62
CHAPTER FIVE.....	64

CONCLUSION AND RECOMMENDATIONS.....	64
5.1 Conclusion	64
5.2 Recommendations	65
REFERENCES	66
APPENDICES	88
Appendix I: Request and approval for secondary data from boresha project	88
Appendix II: Map of study area.....	89
Appendix III: Questionnaire	90

LIST OF TABLES

Table 4.1: Socio-demographic characteristics of FSWs in Mombasa County between 2014 - 2015	34
Table 4. 2: Female sex workers' behaviour, frequency and type of sexual intercourse with partners in Mombasa County between 2014 - 2015	36
Table 4.3: Alcohol use and violence among female sex workers in Mombasa County between 2014 - 2015	39
Table 4.4 : Knowledge of HIV prevention and testing by FSWs in Mombasa County between 2014 - 2015.	41
Table 4.5 : Attitudes toward HIV testing among FSWs in Mombasa County between 2014 - 2015	43
Table 4.6 (b): Association of FSWs Socio-Demographic Characteristics, Behaviors and Frequency of Sex / Sex Type with Risky Sex Practices in Mombasa County between 2014 - 2015.....	43
Table 4.6 (b): Association of FSWs socio-demographic characteristics, behaviors and frequency of sex / sex type with risky sex practices in Mombasa County between 2014 - 2015.	48
Table 4.7: Alcohol use and violence factors associated with risky sex practice in Mombasa County between 2014 - 2015	51
Table 4.8: Knowledge of HIV prevention and testing factors associated with risky sex practice in Mombasa County between 2014 - 2015	53
Table 4.9: Predictors of risky sex practice among FSWs in Mombasa County in 2015	56

LIST OF FIGURES

Figure 1.1: Conceptual framework7

Figure 4.1: Distribution of condoms used.....37

LIST OF ABBREVIATIONS AND ACRONYMS

AI	Anal Intercourse
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
ERC	Ethical Review Committee
FSWs	Female Sex Workers
HIV	Human Immune Deficiency Virus
HPV	Human Papilloma Virus
ICRH	International Center for Reproductive Health
IP	Intimate Partner
KNBS	Kenya National Bureau of Statistics
KNH	Kenyatta National Hospital
KP	Key Population
MARPs	Most at Risk Populations
MPH	Masters in Public Health
MSM	Men who have Sex with Men
NACOSTI	National Commission for Science, Technology and Innovation
NASCOP	National AIDS and STI Control Program
PLHIV	People Living with HIV
PrEP	Pre-Exposure Prophylaxis
PWID	People Who Inject Drugs

REF	Risky Sexual Behaviour
SD	Standard Deviation
SRH	Sexual and Reproductive Health
STIs	Sexually Transmitted Infections
STDs	Sexually Transmitted Diseases
TLD	Tenofovir Lamivudine Dolutegravir
TUM	Technical University of Mombasa
UNAIDS	United Nations Program on HIV/AIDS
VI	Vaginal Intercourse
WHO	World Health Organization

DEFINATION OF TERMS

Early sexual debut Having first incident of sexual under the age of 15 years

Risky sex

The activity that will increase the probability that a person engaging in sexual activity with another person infected with a sexually transmitted infection will be infected

Sex work

The exchange of sexual services, performances, or products for material compensation.

Prostitution

The practice of engaging in relatively indiscriminate sexual activity, in general with someone who is not a spouse or a friend, in exchange for immediate payment in money or other valuables

Female sex workers

Girls and women who regularly or occasionally receive money in exchange for sexual services.

ABSTRACT

Female sex workers (FSWs) are vulnerable to acquiring HIV and other sexually transmitted infections due to risky sexual practices. Risky sexual practices refer to sexual acts and behaviours that increase the chances of contracting and transmitting sexually transmitted infections. Understanding and addressing the gaps in safer sexual practices among FSWs can help to reduce HIV acquisition and transmission. This study focused on the sexual practices, their determinants, HIV knowledge, and use of HIV testing services among FSWs in Mombasa County, Kenya. Cross-sectional research design was adopted in the investigation. Respondents were recruited by systematic random selection at predetermined intervals from bars and clubs until a sample size of 160 was reached. Women who were above 18 years and had in the past exchanged goods or money for sex were referred to as female sex workers. Descriptive statistics and inferential analysis using R was done and $p < 0.05$ was regarded statistically significant. Ethical approval and clearance were obtained from the Kenyatta National Hospital and University of Nairobi Ethics Review Committee. Informed consent was obtained from participants prior to the interviews. Most of the participants (98.74%) were unmarried, 97.48% reported vaginal intercourse, 50.96% reported using alcohol before sex and 10.69% had a tertiary education. Risky sex was practiced by 27.67% of study participants. Slightly more than a half (64.15%) had tested for HIV within three months, 13.84% believed that it is safe to reuse condoms and 10.06% that it is safe engaging in unprotected sex. Risky sexual practices in bivariate analysis were associated with frequency of sexual intercourse, frequency of vaginal intercourse, alcohol use, violence and poor HIV knowledge. In multivariate analysis, risky sexual practices were associated with frequency of sexual intercourse, alcohol use and poor HIV knowledge. Female sex workers are still engaging in unprotected sex while intoxicated, belief in re-using condoms and high frequency of sexual intercourse. Alcohol use significantly correlates to risky sexual practices. Few FSWs test for HIV within three months and some still has poor knowledge about HIV. Interventions to address these modifiable factors such as promoting partners' conversations about condom use, routine alcohol use risk reduction counselling and creating FSWs social networks are needed.