

**THE REASONS WHY WOMEN IN NDOLA URBAN ARE NOT USING
EMERGENCY CONTRACEPTIVES.**

BY

**JENIPHER MULENGA CHANGALA MIJERE
BSc. NURSING, ZRM, ZRN**

THESIS

M.P.H.

MPH

2005

C.1

A dissertation submitted to the University of Zambia in partial fulfillment of the requirements of the degree of Master of Public Health (MPH)

University of Zambia
School of Medicine
Department of Community Medicine
January, 2005



STATEMENT

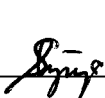
I hereby certify that this study is entirely the result of my own independent investigation. The various sources to which I am indebted are clearly indicated in the text and in the references.

Signed.....*Shere*.....

DECLARATION

This dissertation is the original work of Jenipher Changala Mijere. It has been prepared in accordance with the guidelines for MPH dissertations of the University of Zambia. It has not been submitted elsewhere for a degree at this or another university.

Signature  Date: 01/02/05
(student)

Signature  Date: 01/02/05
(Supervising Lecturer)

CERTIFICATE OF COMPLETION OF DISSERTATION

I*Jenipher C. Ryce*....., hereby certify that this dissertation is the product of my own work and ,in submitting of my MPH program, and further attest that it has not been submitted in part or in whole to another university.

Signature.....*Jae*.....Date:.....*01/02/05*.....

APPROVAL FOR SUBMISSION OF DISSERTATION

I/We Prof. Seter Sizya.....having supervised and read this
dissertation, am/are satisfied that the work has been completed satisfactorily and is ready
for presentation to the examiners.

Signature/supervisor:.....Sizya.....Date: 21/02/05.....

HEAD COMMUNITY MEDICINE
SCH. COLLEGE OF MEDICINE
UNIVERSITY OF ZAMBIA
PO BOX 50110 ZAMBIA

Department.....Community Medicine.....

00263164

DEDICATION

This study is dedicated to my two late brothers (Cornelius and Godfrey Changala) and to my family.

ACKNOWLEDGEMENTS

The production of this dissertation was not going to be possible without sharing of knowledge, ideas, resources and support with other people. Therefore, my appreciation go to all those who contributed to the success of this of this study in one-way or another.

I would also like to sincerely thank the government of Zambia through the Central Board of Health and the USAID for affording me this opportunity to undertake this master of public health (MPH) program at the University of Zambia.

Special thanks go to my supervisor Professor S. Siziya for his interest in this study, guidance and assistance especially during the crucial time of data analysis. I am also grateful to my co-supervisor Dr S.H. Nzala for his patience and understanding. Many thanks go to Professor K. S. Baboo for his guidance and corrections of the proposal. Special thanks go to the Research Ethics Committee of the University of Zambia who gave me the clearance to go ahead with my study.

Many thanks go to the Ministry of Health, Ndola Central Hospital Management Board for granting me permission to study, to Ndola School of Midwifery for its recommendations for me to take up my MPH training, to Ndola District Health Management Board with various health centers where my study took place and of course to my esteemed respondents (clients and health providers) for allowing me to collect data from them.

I am indebted to my husband Dr .P. Mijere and my children for they love, patience and support, to my cousin A. Chongo for his help and encouragement with the initial data entry and analysis, Mr.Gwai, Dr.J.Chimba for their assistance and comments with the analysis.

I would like to thank the following people for their psychological support and help: Dr. D. Decoy ere, Dr .M. Chipimo, Dr. M. Macwangi, my friends Mrs. I. Simbuwa, Mrs. .M. Chiwila, Mrs .J. Muyunda Mrs. H Lukonde and my niece Ms.M. Yombwe.

TABLE OF CONTENTS

Statement.....	i
Declaration.....	ii
Certificate of completion of dissertation.....	iii
Approval.....	iv
Dedication.....	v
Acknowledgements.....	iv
Table of contents.....	vii
List of Tables.....	ix
List of acronyms.....	xii
Operational Definitions.....	xiii
Abstract.....	xiv
 CHAPTER ONE: INTRODUCTION.....	 1
1.0 Background information.....	4
1.2 Statement of the problem.....	5
1.3 Justification of the study.....	8
1.4 Objectives.....	8
1.5 Research Questions.....	9
 CHAPTER TWO: LITERATURE REVIEW	
2.0 Global perspective.....	10
2.1 Providers Knowledge	12

2.2	Knowledge and use of EC in women.....	12
2.3	Barriers to access/availability	15
2.4	Preventing unwanted pregnancies among adolescents.....	15

CHAPTER THREE: METHODOLOGY

3.0	Research Design.....	18
3.1.0	Identification of variables.....	18
3.1.1	Knowledge about the existence of EC.....	18
3.1.2	Perception.....	19
3.1.3	Myths/Taboos.....	19
3.1.4	Availability/Accessibility of the method.....	19
3.1.5	Information about EC.....	19
3.1.6	Education Level.....	20
3.2.1	Research Setting.....	20
3.3	The Study Units.....	20
3.4	Inclusion Criteria.....	21
3.5	Exclusion Criteria.....	21
3.6	Sample Selection.....	21
3.6.1	Sampling methods.....	21
3.7	Data collection	22
3.8	Ethical Consideration.....	22
3.9	Pretest.....	22
3.10	Quality Control checks.....	23
3.11	Limitation of the study.....	23
3.12	Data processing and analysis.....	23

CHAPTER FOUR: FINDINGS

4.0	Section A.....	24
4.1	Section B.....	33

CHAPTER FIVE: DISCUSSION

5.0	Demographic profile of respondents.....	37
5.1	Respondents knowledge about contraceptive method.....	39
5.2	Knowledge of EC in women.....	40
5.3	Health providers' knowledge of EC.....	41
5.4	Information about EC.....	41
5.5	Preventing unwanted pregnancies among the adolescents.....	42
5.6	Accessibility and availability of EC.....	43

CHAPTER SIX

6.0	Conclusion.....	45
6.1	Recommendations.....	45

LIST OF TABLES

Table 1.....	24
Table 2.....	25
Table 3.....	25
Table 4.....	26
Table 5.....	27
Table 6.....	27
Table 7.....	28
Table 8.....	28
Table 9.....	29

Table 10..... 29

Table 11..... 29

Table 12..... 30

Table 13..... 30

Table 14..... 32

ANNEXES

ANNEX 1..... 47

ANNEX 2..... 49

ANNEX 3..... 50

ANNEX 5..... 55

ANNEX 6..... 56

ANNEX 7..... 57

ANNEX 8..... 64

LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
COC	Combined Oral Contraceptives
CBoH	Central Board of Health
CO	Clinical Officer
DHMT	District Health Management Team
EC	Emergency Contraceptives
EM	Enrolled Midwife
EN	Enrolled Nurse
FHI	Family Health International
FP	Family Planning
GRZ	Government of the Republic of Zambia
IUD	Intra Uterine Device
KAP	Knowledge Attitudes and Practice
LAM	Lactational Amenorrhoea
MOH	Ministry of Health
NCH	Ndola Central Hospital
PCC	Postal Coital Contraception
PPAZ	Planned Parenthood Association of Zambia
PPASA	Planned Parenthood of South Africa
POP	Progestosterone Only Pill
STDs	Sexually Transmitted Diseases

UNICEF	United Children Emergency Fund
USA	United States of America
WHO	World Health Organization
VCT	Voluntary Counseling and Testing

OPERATIONAL DEFINITIONS

Attitude/perceptions: One's settled mode of thinking about Emergency Contraceptives as indicated by their opinion.

Contraceptives methods: Methods of Family planning such as Condoms, pills, IUD and Injectables.

Dependent variable: Non-use of EC by clients.

Emergency Contraception: Methods of Contraception used immediately or within 3 days or 5 days of unprotected Sex.

Independent variables: Factors identified and associated with non-use of EC.

Knowledge: Familiarity gained by experience.

Non-use: Inability or lack of clients to use emergency contraceptives.

Sampling: The method used to select the study populations and study units.

Sex: Sexual intercourse.

The researcher: The one responsible for investigating a problem.

The ability to determine when or even whether to have children is an extraordinarily important human right that benefits not only the individual woman, who is able to control her fertility, but also others. Family planning helps women protect themselves from unwanted pregnancies. Food and other resources are available in greater amounts for the family members when children are spaced and when the total family size is small. Teenage pregnancy rates are reduced. The government is committed to an active Family Planning policy and has taken measures to make available a broader range of contraceptive methods.

Objectives: The objectives of the study were to determine factors associated with contraceptive use, to determine the cause of nonuse of emergency Contraceptives (EC), to determine the possible barriers which may be contributing to non use of EC and to determine needs for awareness campaigns among women of child bearing age (15-49) years.

Design: Cross- sectional study

Setting: Copperbelt Province Ndola urban

Subjects: Women of childbearing age of 17-49 years (383) and health providers from government health centers (217).

Main outcome measures: Reasons why women of child bearing age in Ndola urban are not using EC.

Result: The key findings of the study included the following: Majority of clients 283 (73.9%) had adequate knowledge of common contraceptive methods used. While 103 (47.5%) of health providers had moderate knowledge. A total of 262 (68.4%) clients were on contraceptives of whom 131 (50.0%) were on contraceptive pills. There were no significant associations observed between education and contraceptive use. However, users of contraceptives tended to be married, older than 20 years and with children. There was no association between contraceptive use and religion.

The study also revealed that the majority of clients 368 (96%) were ignorant about EC and 167(77.0 %) health providers had inadequate knowledge about EC. The majority of clients 368(96 %) and 157 (72.4 %) health providers did not know any type of EC. Asked whether EC would be a useful method for the community, the majority of both groups of respondents agreed that EC could be a useful method for the community. Significantly, more health providers (98.6%) than clients (90.3%) agreed that it could be necessary to educate women of childbearing age and health providers on EC use. It was also discovered that more health providers (13.8%) than clients (3.4%) had any beliefs or taboos concerning EC use.

Conclusions

Lack of knowledge and information about the existence of the methods were the main reasons for non-use of EC. EC is useful in preventing unwanted pregnancies especially in adolescents and there is no evidence that knowledge of these methods of contraception have the effect on encouraging sexual activity among young people. On the other hand, the need for EC could be a stimulus that can bring adolescents into contacts with health care providers, thus providing opportunities for counselling on responsible sexual behaviour, contraception and prevention of STD/HIV and AIDS.

Recommendations included: Reproductive health and Family Planning topics

should be introduced early in primary and secondary education, health providers need special training in family planning methods including EC, identification of potential users of EC and sensitizing women of childbearing age in the community about use of

EC, EC should be part of family planning method mix and all clients on contraceptives should be taught in case of failure of their regular methods and a deliberate policy should be formulated to ensure that all urban health centers were equipped with at least one method of repackaged EC.

CHAPTER ONE

1.0 INTRODUCTION

The ability to determine when or even whether to have children is an extraordinarily important human right that benefits not only the individual woman who is able to control her fertility, but also others. Family planning helps women protect themselves from unwanted pregnancies. As a result many women's lives have been saved from the high-risk pregnancies or unsafe abortions. If all women could avoid high-risk pregnancies, the number of maternal deaths could be reduced by one quarter. Family planning saves lives of children by helping women space births. Food and other key resources are available in greater amounts for all of the family when children are spaced and when the total family size is small. This is particularly important for young teens, as their pregnancies may be very damaging. Happier sexual relationships can develop as the fear of unwanted or unplanned pregnancy diminishes. Family planning helps nations develop. In countries where women are having fewer children than their mothers did, people's economic situations are improving faster than in most other countries (Hatcher, 1994).

Many different people can provide family planning methods. Countries and programs have various rules about who can offer which methods and where. In Zambia, the following people commonly provide family planning: Nurses, nurse-midwives, physicians, pharmacists, clinical officers, primary health care workers, specially trained birth attendants, community –based distributors, volunteers, experienced users of family planning methods, peer educators and trained community leaders.

Various methods of family planning are available such as oral contraceptives pills including emergency contraceptives (EC), injectables, intrauterine devices (IUDs), Norplant implants, condoms, female sterilization, vasectomy, spermicides, lactational amenorrhea (LAM) and natural family planning. The effectiveness of family planning methods can be divided into three groups. The very effective such as Norplant implants, vasectomy and female sterilization, the effective such as the IUDs and the somewhat effective such as the condoms and spermicides. But all the methods are effective when used correctly and consistently.

The high number of women who resort to unsafe abortion is a powerful reminder that women need access to a wide range of family planning methods to help them safely control their own fertility. The fact that so many women risk death, injury and social or criminal consequences to terminate a pregnancy demonstrates clearly how desperately these women wish to delay or avoid having children. Many who have unsafe abortion procedures suffer complications and go to the hospital or other facility for treatment. These women rarely leave the hospital armed with the knowledge and the means to avoid repeating the process of unprotected intercourse, unwanted pregnancy, and unsafe abortion that so often end in death, injury or long-term morbidity.

For centuries, women have used a variety of devices and preparations to prevent pregnancy after unprotected sex. Although emergency contraception has been used since 1960, it is mainly in developed countries especially in Europe where special packaged products have been available for several years. Emergency contraception (EC) is a method of contraception that a woman can use after an experience of unprotected sex.

The most widely used EC methods are regimes of birth control pills, which use the same hormonal ingredients found in regular oral contraceptives but in higher doses. The intra uterine devices can also be used for emergency contraceptives. Oral contraceptives should be started as soon as possible after unprotected sex, ideally not later than 72 hours for the 1st dose and the 2nd dose should be taken exactly 12 hours later. The EC pills work by preventing or delaying ovulation (if the pills are taken early enough in the cycle) rendering the endometrium unfavorable to implantation should an egg be fertilized and disrupting conditions necessary for the egg to travel from the ovary to the uterus. Intra uterine device (IUD) can be used as a method of EC up to 120 hours (5 days) after unprotected sex. There is no evidence that emergency pills or IUD are abortifacient. Therefore, almost all women can use either of these.

The government is committed to an active Family Planning Policy and has taken measures to make available a broader range of contraceptive methods. Increasing the availability of EC methods would further the objectives of this Family Planning initiative.

Unwanted or unplanned pregnancies can have serious physical, mental and social consequences for the woman. These account for a lot of avoidable suffering and avoidable deaths worldwide. For instance, each year over 500,000 women die from causes related to pregnancy and childbirth. It is estimated that 100,000 maternal deaths could be avoided each year if all women who did not want any more children were able to stop childbearing (WHO, 1991). Majority of these deaths are due to unsafe abortions.

A study was conducted in China to evaluate the efficacy and side effects, benefits and limitation of IUD for EC. A total of 1013 women requesting for EC were recruited of whom 843 were multiparous and 170 were nulliparas. IUD was inserted 120 hours after unprotected sex. Results showed two pregnancies occurred, one from each group. Efficacy rate was 98% in multiparous women and 92% in nulliparous women. The majority of women retained the IUD for contraception.

There is no age limit. Women should therefore know about these methods and have them on hand before the need arises. EC should be seen as a back up method for occasional use only rather than a substitute for regular use of effective primary contraception. Requests for EC provide an important opportunity to help a woman meet her general contraceptive requirements looking at both short and long term needs. Emergency contraceptives are a convenient form of protection that women can use to minimize the chance of pregnancy, if they forget to use their regular contraceptive methods or their regular method fails such as condom burst. EC methods can also be used in cases of sexual abuse or coerced sex.

1.1 BACKGROUND INFORMATION

Interest in EC has grown considerably in the past few years. In April 1995, experts from around the World met in Bellagio, Italy and produced a consensus statement on EC calling on providers to learn about the methods and to make them available to all women who may need them. The World Health Organization (WHO) is one of the international reproductive health organizations that have worked hard to make EC more widely available to increase the knowledge of providers and consumers about the methods.

The International Conference on Population and Development (ICPD) held in Cairo in 1994 and the Fourth World Conference on Women held in Beijing in 1995 emphasized the importance of responding to women's needs for reproductive health and family planning. If their reproductive rights are to be honored, individuals and couples must have access to the information and services they require for healthy, responsible and satisfying sex lives, free from coercion. This includes the freedom to decide for themselves on how many children they want to have and when to have them. The concept of reproductive rights should be promoted and the means to fulfill them should be available and readily accessible.

Later in 1995, the Zambian Ministry of Health completed a national assessment of contraceptive needs applying a methodology outlined by WHO in its strategic approach to the Introduction and Transfer of Technologies for Fertility Regulation. The assessment contributed towards the development of user-friendly guidelines for the provision of Family Planning Services, and it provided the Ministry with a framework for research in the field of Contraceptive Introduction. It highlighted problems within the reproductive health environment, which sought to strengthen the availability of new and or under utilized methods while at the same time, using the introduction of these methods as a means to improve the quality of services in general. The assessment demonstrated that despite the EC method being available, it was not well known by clients and providers, seriously hampering its use in preventing unwanted and unplanned pregnancies.

1.2 STATEMENT OF THE PROBLEM

According to Zambia Demographic Health Survey (1996), Ndola District has a total population projected at 406,496 people with a growth rate of 1.6%.

The total projected population is 406,496 with 89429 women of childbearing age, 21950 numbers of expected pregnancies and 21137 numbers of expected deliveries. The percentage of females and males is 51.2 percent and 48.8 percent respectively. The population is young and as such most health sector activities are aimed at reducing the disease burden arising from preventable diseases and those coming out from their social behavior and those related to economic factors.

The decline in economic activities in the district is likely to have “epidemiological” consequences. The closure of factories and business premises due to the economic downturn has resulted in a dramatic increase in the number of households without breadwinners, thus perpetuating the Disease-Hunger- Ignorance cycle on a large scale.

A petroleum refinery is situated at the industrial area of Ndola. Tankers carrying fuel from the oil refinery to all parts of the country converge in the district daily. The truck drivers spend sometime in various townships before leaving with their consignments. This has made Ndola an HIV belt district. Coupled with the annual event of the international trade fair held every year in July for four days, the district suffers a lot of communicable diseases. Although the minimum age for child bearing age is 15 years young girls less than this have been reported pregnant. The harsh socio- economic climate has further been exacerbated by the impact of HIV/AIDS on families and communities, who are either infected or affected by the scourge.

Ndola urban district has 18 government health centres and 2 hospitals, Ndola Central Hospital and Arthur Davison Hospital.

There are 24 Private and Company clinics in the district. All the 18 Health Centres are stage 2 health centres with a bed capacity of 78 and 15 cots. A total of 121 Neighborhood Health committees are found in the district. Five clinics are currently operating on a 24-

hour basis specifically to provide maternity services. Five ambulances serve the 18 health centres with an efficient radio communication connected to some of the centres. X-ray facilities are not available in the district health centres. Voluntary Counseling and Testing (VCT) services have recently been introduced in the district at Lubuto health centre.

A Contraceptive Needs Assessment for Zambia conducted in 1995, suggested an overall lack of adequate knowledge of family planning technologies among service providers, lack of understanding of the relevance of screening procedures and counseling and large provider biases in method selection and towards clients (MOH and WHO, 1995). The study also highlighted the need to expand the choice of methods. In 1995, there were effectively two methods available, the pill and condom. The study recommended that new methods be introduced to augment the available methods. These recommendations have been implemented and currently, the ranges of methods include two brands of vaginal foaming tablets, injectable Depo-Provera, emergency oral contraceptive, male and female condoms (NANDA, 2000). In 1996, the most used methods of contraception were the condom, the pill, female sterilization and injectables (ZHDS, 2003). The survey also revealed that less than half the demand for family planning services was met. Such high unmet need was associated with a high rate of induced abortions. This could be due to the fact that despite couple's knowledge about contraceptive methods only a few used them.

Among sexually active women, married and single, 21 percent used the pill and 17 percent used the condom. 28 percent used traditional methods and 11 percent used natural family planning. Use of EC was not mentioned.

In 1995, the Population Council, USAID and the University Teaching Hospital conducted a study on emergency contraceptives. In the first phase EC was made available in 21 facilities across Lusaka and Copperbelt regions and 89 providers were trained.

The study made recommendations on access, product administration, managing side effects, and transition from emergency contraception to routine use and training for a range of service providers.

Non-governmental organizations such as the Planned Parenthood Association of Zambia (PPAZ) prescribe EC for potential users on a large scale. A random check at some urban health centers in Ndola revealed that no Emergency Contraception was used or prescribed although it was part of the method mix. In essence many women who had a need for EC did not use it. This assertion is supported by the increase in the number of unwanted pregnancies and illegal abortions procured by women especially adolescents. For instance, in the year 2000, 101 teenage abortions were reported at Ndola Central Hospital, 182 in the year 2001 and 226 in the year 2002 (2000, 2001, 2002 Gynaecology ward report books). This steady increase prompted the district to formulate Youth Friendly Services to try and encourage adolescents to use family planning services. But it has been discovered that the adolescents (few interviewed) do not like using the regular methods because some do not have regular sexual activity and therefore, do not see the need for a regular method. In the process, they have unprotected sexual activity and subsequent unplanned pregnancies and illegal abortions. Although EC is readily available, potential users seem not to be using it. This has prompted the researcher to determine the cause of non-use of EC by women in Ndola urban.

1.3 JUSTIFICATION OF THE STUDY

As far as developing countries are concerned, Emergency Contraception is an innovation. All women in child bearing age (15-49years) should be educated on the use of emergency contraception so that when need arises they can confidently use the methods. This would reduce the number of induced abortions and unwanted pregnancies together with their unpleasant sequela. In Zambia, we have a problem of street kids, and dumping of babies by women. If emergency contraception is widely used, these problems will be reduced greatly. Therefore, the researcher seeks to investigate and compare some of the known factors associated with non-use of EC between clients and health providers.

This was the first study in Ndola on emergency contraception. Results of the study will be communicated to policy makers, stakeholders, Ndola District Health Management Board (DHMT), Ndola Central Hospital, health providers and clients on emergency contraceptive use so that solutions would be found to reduce unplanned or unwanted pregnancies.

1.4.0 OBJECTIVES OF THE STUDY

1.4.1 GENERAL OBJECTIVE

To compare known factors associated with non-use of emergency contraceptives between clients and health providers in order to promote its use.

1.4.2 SPECIFIC OBJECTIVES

1. To determine factors associated with use of contraceptives.
2. To determine the causes of non-use of EC.
3. To determine the possible barriers which may be contributing to non-use of EC.
4. To determine needs for awareness campaigns among women of childbearing age (17-49 year).

1.4.3 **RESEARCH QUESTIONS**

1. Why are women of child bearing age in Ndola Urban not using emergency Contraceptives?
2. Are there any barriers in accessing emergency contraceptives?

CHAPTER TWO

LITERATURE REVIEW

2.0 GLOBAL PERSPECTIVE

Although Emergency Contraception was introduced into clinical practice, more than 25 years ago and has proved to be an effective means of preventing unwanted pregnancy, knowledge and use of the method remain disappointingly low, and only a few family planning programs appear to provide EC as part of their routine services (Baid et al, 1993). Evans, 1997 stated that EC is safe and effective and it should be widely promoted and availability ensured for all who need to use it, from both clinical and non-clinical practice. According to the American News by Wendy (2001), only 11 percent of American women aged 18 to 44 years know enough about emergency contraceptive to be able to use it. Lack of knowledge about fertility and the means to regulate it, lack of power to make decisions about one's sexual and reproductive life, lack of access to contraception, and the poor quality of available family planning services are just some of the many reasons behind the low statistics.

Therefore, tackling these problems requires important change of strategy in the education and empowerment of women in the reproductive health care systems as provided by society (ICDP, 1994). By offering EC information and care, various services outlets can serve as a first contact point where sexually active women, men and adolescents can receive counseling and referral information. EC can thus play an important role in linking individuals and couples to available reproductive health and family planning care.

2.1 PROVIDERS KNOWLEDGE

In developed countries some providers have long known about EC and have offered it even when it meant dividing regular packets of oral contraceptives to dispense as EC. This practice was common at government and Family Planning Clinics (Braul, 1998). However, such resourcefulness and confidence in dispensing EC pill is the exception to the rule.

Numerous studies have demonstrated that in developing countries providers lack knowledge and have misconception about the pill especially when they are not readily available as a dedicated product. Even providers who know about the method often do not offer it to eligible women. A survey conducted in Ghana evaluated health providers knowledge on EC. The survey found that about one third of 323 interviewed providers had heard of it but none knew how to prescribe it correctly (FHI, 1997). According to a study of knowledge and attitudes about EC among health providers in Vietnam, most providers were familiar with post coital insertion of IUD only and lacked accurate knowledge and detailed information about other equally useful methods used (Nguyen, 1997). Providers advocated for additional training for themselves and druggists who provide these methods over the counter. In Mexico, a study conducted to introduce EC initially found that three of every four service providers surveyed had heard of the method, but only 30 percent knew the correct dosages to prescribe and only seven percent offered the method.

An evaluation showed that training and providing better information helped correct misinformation and reduces unnecessary concerns about the method. Results of two small surveys of Family Planning associations and health care providers in developing countries indicate that EC currently was not fully integrated into reproductive health services. In one study only 43 percent provided the methods citing numerous barriers to providing EC including misconceptions and lack of information (FHI, 1996).

In the past five years, major international reproductive health organizations, including WHO, have recently worked to make emergency contraceptives more widely available by increasing the knowledge of providers and consumers about the available methods. They are also studying unresolved research issues (Family Health International Network, 2001). Educators need guidance on how to provide information on EC in a way that promotes contraceptive use before and during sex, but should unforeseen events occur, allow teenagers or women to act to prevent unplanned pregnancies. A major misunderstanding that needs to be corrected is the mistaken belief that EC methods act as abortifacient.

For this reason, factual information must be widely disseminated stating exactly what EC is and what it is not.

Further more, some providers' worry that telling clients about emergency contraceptive pills may encourage women to use emergency contraception routinely instead of using it as a backup method only. To address the needs of health providers, professional meetings, use of articles in scientific journals, fact sheets, service delivery guidelines, seminars, contraceptive technology updates and training workshops all have a role to play (FHI, 1996).

Some studies indicate that knowledge about the use of EC pills do not discourage women from using regular contraception. A Primary reason is that some side effects of EC pills discourage women from using them routinely. Requesting prescriptions for EC pills is a major obstacle or barrier to effective use because women are often unable to consult a health care provider quickly to obtain a prescription. Providers sometimes limit access to EC unnecessarily due to unfounded concern about effects from using pills.

Studies have shown that EC does not encourage adolescents to engage in sex. Some providers are concerned about potential health risks to adolescents if they have easy access to EC. EC for adolescents can help prevent unplanned pregnancies and might also serve as a young woman's introduction to a regular contraception. According to Trussel (2000), even under ideal conditions, access to EC is currently constrained. He noted that although EC could significantly reduce the incidence of unintended pregnancies and the consequent need for abortions, its potential would not be realized unless women have better access to clinicians who can prescribe EC pills. In the United States for example, Kaiser, (1994) showed that only about one percent of American and only a quarter of gynecologists regularly prescribed it.

2.2 KNOWLEDGE AND USE OF EC IN WOMEN

The majority of women in developing countries currently have no access to any method of emergency contraceptive. The most important intervention would be to offer women

any of the currently available post-coital contraceptives. Any safe and effective regime would be better than nothing (Ellerstien, 1999).

Rates of emergency contraceptive use appear to be highest in those European countries where emergency contraceptive pills come especially packaged in the proper dosages with instructions for doctors and patients. For instance in the Netherlands, which has the lowest abortion rate. EC is widely available as a back up for other family planning methods (WHO, 1994). Since the introduction of EC in Sweden, in 1994, EC has become a welcome addition to the campaign against unwanted pregnancies especially among the adolescents. Of those requesting EC, 54% did so because no contraceptive was used prior to unprotected sex. Thirty two percent used EC because of a ruptured condom, 11 % because of missed oral contraceptives and 5% had mixed reasons (Gabriella, 1994).

According to the KAP study conducted in Shanghai China, among women seeking surgical termination of pregnancy, over half (60 percent) of the induced abortions could have been prevented if the women in the study had used emergency contraception. The majority 98 percent of the pregnancies was unplanned.

A similar KAP study was done in South Africa with clients in urban and rural areas. Only 22 percent of clients had heard of EC and nine percent had used the method. Awareness was lower than in developed countries but higher than in other developing countries. This indicates that if women know of EC, where to get it and how soon to take it, they would use it if needed (Smith, 2000).

A survey conducted in Kenya, revealed that only 10 percent of 282 female clients were aware of EC when an introduction program began. In a New Zealand study to determine why women do not use EC it was found that many women knew about EC but few were using it. The author indicated that the discrepancy between the numbers of women who knew of the EC pill (72%) and the women who used it to try to prevent pregnancy (7%) indicates that there are barriers to obtaining and using the EC pill. The study demonstrated a lack of knowledge of the EC pill in women attending the abortion clinic.

The majority of women seeking termination of pregnancy would have used the EC pill if they had it available at home or over the counter through a pharmacy. The study went on to suggest that doctors prescribing the pill and barrier methods should consider providing a supply of EC pills at the same time and consideration should be given to over the counter prescribing of EC pill in New Zealand.

Emergency Contraception is slowly gaining recognition as a safe and effective way to decrease pregnancy rate among barrier method users. It is widely used in the Netherlands, Finland and UK, and it is gaining recognition in the USA. EC is still unavailable in many developing countries. A 1994 survey of affiliates of the International Planned Parenthood Federation found that 7 affiliates in Africa and South Asia that offer EC services treated a combined total of only 100 patients annually.

A study conducted in Ghana evaluated the effect of two approaches to EC use and unprotected intercourse among women relying on spermicidal for contraception. The study enrolled 211 women at 4 FP clinics in Ghana. At two clinics participants were asked to return to the clinic within 3 days after unprotected sex to obtain EC. At the other two clinics participants were given EC to take home for use if unprotected sex occurred. All the women used EC after at least 78% of unprotected coital acts. Women who had the pills at home used EC more promptly.

A similar study conducted in Zambia sought to determine which emergency contraceptive strategy was most effective at the lowest cost. It revealed that 80 percent of the women who needed to use emergency contraceptives and who had the pills on hand did use them within 24 hours after unprotected sex. Those who had prescription cards did not obtain EC any sooner than those with neither pills nor a prescription card. The study also found a need for better emergency contraception counseling (Family Health International, 2001). Another study conducted in Lusaka; among women seeking induced abortions revealed that if they had known about the method they could have used it. Many health care providers need to be trained, as the number of people that will need to know about EC will be increasing. The researcher recommended the local health centres

to incorporate provision of EC during weekends and holidays to departments that are open during this time and the methods to be available in all government health centres (Emergency Contraceptive, 2002).

2.3 BARRIERS TO ACCESS/AVAILABILITY OF EC

Each year 3.5 million women in the U.S become pregnant unintentionally. More than half of these pregnancies occur because no contraceptive was used. Some pregnancies occurred because of contraceptive failure (Hatcher et al, 1994).

Potentially emergency treatment could reduce this number of unintended pregnancies and as much as 0.8 million abortions could be reduced. EC could bring Family Planning services to whole new populations of individuals at risk.

Knowledge of contraceptive methods is high for both modern and traditional methods among married men and women of reproductive age, at 99 and 96 percent respectively. Yet the use of contraceptives remains low for both men and women. The main reasons for these low rates are poor access to service and cultural factors.

Methods that can be used in Emergency situations are typically not packaged or labeled specifically for this purpose and may not have been granted regulatory approval. Different regimes for normal contraceptive use and for emergency use, the timing, utilization and dosage may be confusing for providers and users, leading to poor compliance and reduced efficacy. Providing contraceptive methods through clinics offers the most control to providers and less access to women. Offering EC over the counter may be more convenient to women giving them greater access and privacy, but they will miss the needed information and counseling from a health provider (FHI, 2001).

2.4 PREVENTING UNWANTED PREGNANCIES AMONG ADOLESCENTS

Many unwanted pregnancies occur during adolescence, when young women and their partners become sexually active before they are fully aware of the need for contraception, or have had access to appropriate service. An unwanted pregnancy has psychosocial and health consequences

for the adolescent mother and her newborn baby. Socio-economic and cultural factors influence the age at which young women have their first sexual intercourse and whether or not they are likely to practice contraception. The family, the school or society at large does not easily accept the idea of adolescent sexuality.

Therefore, adolescents in many countries are denied education on sex or family life or else the education they are given is inadequate and fails to take account of their real needs. Further more, adolescents rarely have proper access to reproductive health care and contraceptive services (WHO, 1998).

Emergency contraception is useful in preventing unwanted pregnancies in adolescents, and there is no evidence that knowledge of this method of contraception has the effect of encouraging sexual activity among young people. On the other hand, the need for emergency contraception may be the stimulus that brings adolescents into contact with health care providers, thus providing opportunities for counseling on responsible sexual behavior, contraception, and the prevention of sexual behavior, including HIV/AIDS.

What is clear is that the need for EC often brings sexually active young people into Family Planning clinics, where they can receive other services and counseling including help in learning how to say “no” when they choose to be abstinent. For adolescents who are already sexually active, EC provides a bridge to effective birth control and disease prevention (Consortium for Emergency contraception, 1997).

The USA had the highest rate of teenage pregnancy rate in the western world at 96 per 1000. The suggestion that an enlightened attitude towards sex predisposes to a much lower rate of adolescent pregnancy and abortion is apparent from a study in 36 western nations. Most women use Post-coital contraceptives only once, followed by a conventional method of contraception (FHI, 2001).

EC is often a solution to adolescents who face problems of condom rupture or seepage because of lack of experience.

Some cite financial reasons for not using condoms and non-availability of condoms in rural areas. As a result the consistent use of condom is very low amongst the youth (WHO, 1998).

CHAPTER THREE

METHODOLOGY

3.0 RESEARCH DESIGN

The purpose of the study was to identify reasons why women of childbearing age in Ndola urban are not using Emergency Contraceptives.

This was a cross sectional study. It involved systematic collection and presentation of data (qualitative and quantitative) in an effort to identify reasons why women of childbearing age in Ndola urban are not using Emergency Contraceptives.

3.1.0 IDENTIFICATION OF VARIABLES

The dependent variable for the study was non-use of emergency contraception among clients 17-49 years.

The following were the independent variables:

3.1.1 KNOWLEDGE ABOUT EXISTENCE OF EC

Lack of knowledge by clients about EC use, leads to non-demand for the methods. Clients can only demand for what they know. Clients may only know about this method from awareness campaign by health providers. If health providers are able to counsel clients on Emergency Contraceptives method they would demand for it because majority of women have unplanned pregnancies.

Insufficient training of health providers' on EC leads to lack of knowledge and non-prescription of the method. Health providers can only prescribe what they know.

EC is a new method on the market and emphasis was not there during most health providers training. Some may have knowledge but lack knowledge about dosages. It is only recently that some health providers are undergoing training on Emergency Contraceptives use.

3.1.2 PERCEPTIONS

Clients may be aware of EC but because of insufficient knowledge they are scared to use it and some perceive it as abortive. Clients may know about this method from colleagues and friends who do not know exactly how the methods work. They develop negative attitudes towards the method. Health providers may have a negative attitude towards EC because of insufficient knowledge about how it works.

3.1.3 MYTHS/TABOOS

Some women are unable to demand for EC because they feel it causes abortions. Zambia was declared a Christian nation. Therefore, most clients are Christians whose doctrine is against abortion because it is said to be equivalent to murder. So they tend to shun away from this method.

Some health providers are unable to prescribe EC because they feel it is abortifacient. Others feel that if it fails to abort, the child would be born disfigured.

Some health providers are scared or unwilling to prescribe Emergency Contraceptives because they feel clients will stop using or demanding for the regular contraceptives in preference to Emergency Contraceptives. Others feel it will encourage women and adolescents to be promiscuous.

3.1.4 AVAILABILITY/ACCESSIBILITY OF THE METHOD

Some women may know about the method but they do not know where to get it and when to get it. Sometimes they would even inquire from the health centres that may refer them to the private surgery or pharmacy. Some Health Providers may know about the method but the methods may not be available at government health centres and hospitals.

3.1.5 INFORMATION

Some clients don't use EC because of lack of adequate information. Normally health

providers are supposed to educate clients about EC in case of method failure, this should be done routinely during family planning counseling. If health providers do not have sufficient information they cannot educate clients.

Some health providers' do not know much about EC because it is a new method and they never learned about it during their training.

3.1.6 EDUCATIONAL LEVEL

Clients who are not educated may not know about EC. Educated women may read about EC from books or magazines and may consult health providers freely when faced with an unprotected sexual act.

3.2 RESEARCH SETTING

This study took place in Ndola district located in the Copperbelt province of Zambia. Ndola is the provincial headquarters for Copper belt province. The town is known as the gateway to the Democratic Republic of Congo (DRC) with which it borders on the eastern and northern part, Masaiti district lies on the southern part and Luanshya is on the western part. The Munkulungwe River separates Ndola from Masaiti district on the southern end. Ndola district also shares boundaries with Kitwe and Mufurila districts. It is located 320 kilometers north of Lusaka and covers an area of 1103 square kilometers. The district has a population of 406,496. The information was collected from a selected total population of 89429 of women of childbearing age.

3.3 THE STUDY UNITS

- a) Women of 17-49 years.
- b) Health providers in government health centres and the general hospital. This included doctors, nurses and clinical officers.

3.4 INCLUSION CRITERIA

Only women of childbearing age with various social-economic backgrounds were eligible for this study. The study population comprised of family planning clients, antenatal mothers, postnatal mothers, adolescents and health providers at 12 urban clinics and the general hospital.

3.5 EXCLUSION CRITERIA

Young women below the age of 17 years were excluded from the study because the minimum age for consent for Zambia is 17 years. Older women above the age of 49 years were also excluded from the study because they are above the reproductive age group. Visiting women to Ndola urban were not part of the study.

3.6.0 SAMPLE SELECTION AND APPROACH

3.6.1 SAMPLE SIZE

The study population was women of childbearing age in Ndola urban. Population size of client was 89,429. Using EPI info statcalc program and considering on expected frequency of 50%, worst accepted proportion of 45% the sample size was 383 at 95% confidence level. Population size of health providers was 700 and using same program the sample size was 217. 50% was used to give an optimum sample size because no information was available to compute the sample size.

3.6.2 SAMPLING METHODS

For health providers a stratified sampling was used to get the sample size required. The sampling frame was first divided into sub groups or strata according to characteristics such as enrolled nurses, registered nurses, clinical officers and doctors. Then a systematic sampling technique was used independently in each stratum. This method eliminated sampling variations with respect to the properties used in stratifying. Health providers working at family planning clinics were conveniently sampled as study units.

A stratified random sampling method was used to select clients among family planning users (stratum1), antenatal mothers (stratum2), under five children mothers (stratum3) and adolescents (stratum4). Some adolescents were selected from youth friendly services register. N was the required sample size for each health centre. A sample size of n1 to n4 was then selected from each stratum respectively where $n1+n2+n3+n4=N$ for that health centre. A simple random sampling method was used in each stratum.

3.7 DATA COLLECTION

Data collection was carried out over a period of 10 weeks. Starting from the second (2nd) week of May 2003 to August 2003. A structured questionnaire was used for clients as an exit interview. A self-administered questionnaire was used for health providers. Focus group discussions were held for health providers and clients to consolidate the data. A total number of 10 participants were selected from each group and the discussions lasted for 30 minutes. The languages used were a mixture of English for health provider and Bemba for clients. The research assistants were from the School of Nursing staff and were trained by the principal investigator over a period of two days.

3.8 ETHICAL CONSIDERATION

Studies involving human subjects require ethical considerations. Clearance to undertake the study was sought from the Research Ethics Committee of University of Zambia based in the School of Medicine. Permission to carry out the study was obtained from relevant authorities in Ndola.

Informed written consents were obtained from respondents after fully explaining to them the purpose of the study. They were assured of confidentiality of the information given.

3.9 PRETEST

A pretest was conducted prior to commencement of the main research to make sure that questions were clear, concise and consistent. Some of the unclear questions were deleted

and some reformulated. The pretest was conducted in one of the small health centre in Ndola that was not included for the study.

3.10 QUALITY CONTROL CHECKS

During data collection at the end of each day, the researcher went through the filled in questionnaires to ensure that all the information was properly collected and recorded. Information was checked for completeness and internal consistency.

3.11 LIMITATIONS OF THE STUDY

The study had the following limitations:
The sample size was limited to clients who attended Government health centres only. Some urban health centres (4) were not included due to distance as the funding was not adequate.

3.12 DATA PROCESSING AND ANALYSIS

Raw data collected from the interview schedule was checked for completeness and internal consistency before entering it in Epi Info version 6. Later, analysis was done using the same package and statistical methods such as chi-square (χ^2) test and p value of 0.05. The chi-square technique was used to determine associations between qualitative variables. The multivariate logistic regression was used to determine independent predictors for congregation use. The cut off point for statistical significance was set at 5%.

CHAPTER FOUR

FINDINGS

The study findings of clients and health providers are presented in Section A. Section B contains results from Focus Group Discussions.

4.0 SECTION A

Table 1 shows the distribution of socio-demographic characteristics. The majority of the clients 200 (52.2%) were in the age range of 20-29 years, while the majority 129 (59.4 %) of health providers was in the age group of 30 years and above. Over three quarters of clients 296 (77.3%) and about half of the health providers 119 (54.8%) were married. Most clients 186 (48.6%) went up to primary education while all health providers went through secondary education.

Table 1: Demographic characteristics of the respondents

CHARACTERISTICS	CLIENTS TOTAL=383		HEALTH PROVIDERS TOTAL=217	
	N	%	N	%
AGE				
17-19 Years	87	(22.7)	0	(0.0)
20-29 Years	200	(52.2)	88	(40.0)
30 years and above	96	(25.1)	129	(59.0)
MARRITAL STATUS				
Single	87	(22.7)	98	(45.2)
Married	296	(77.3)	119	(54.8)
LEVEL OF EDUCATION				
None	19	(5.0)	0	(0.0)
Primary	186	(48.6)	0	(0.0)
Secondary	166	(43.3)	0	(0.0)
College and above	12	(3.1)	217	(100)
NUMBER OF CHILDREN				
None	55	(14.4)	50	(23.0)
1-3	236	(61.6)	110	50.7)
4 and above	92	(24.0)	57	(26.3)
RELIGION				
Christians	376	(98.2)	206	(94.9)
Others	7	(1.8)	11	(5.1)

The majority of clients were full time housewives 244 (63.7%) while 81 (21.2%) were self-employed. Others included pupils and young girls who were neither married nor school going. Health providers included Zambia enrolled nurses (ZENs), clinical officers (CO), registered nurses (RNs) and doctors (DRs). Almost all clients 376 (98.2%) and health providers 206 (94.9%) were Christians. The majority of both clients 236 (61.6%) and health providers 110 (50.7%) had 1-3 children.

Table 2 shows that the majority of clients 283 (73.9) did not have adequate knowledge of contraceptive methods used, while the majority of health providers 103 (47.5%) had moderate knowledge. ($X^2= 213.29$, $df=2$, $p < 0.001$).

Table 2: Respondents’ knowledge of contraceptive methods

KNOWLEDGE	CLIENTS Total=383		HEALTH PROVIDERS Total=217	
	N	%	N	%
Adequate knowledge	26	(6.8)	85	(39.1)
Inadequate knowledge	283	(73.9)	29	(13.4)
Moderate knowledge	74	(19.3)	103	(47.5)

A total of 262 (68.4%) clients were on contraceptives while 121 (31.6%) were not using any form of modern contraception. Half of the clients 131 (50 %) were on contraceptive pills followed by injectables 106 (40.5%) as shown in Table 3.

Table 3: Choice of contraceptive methods among clients who used contraceptives

METHOD	NUMBER Total =262	PERCENTAGE
Contraceptive pills	131	50
Condoms	15	5.7
Injectables	106	40.5
Norplant	4	1.5
IUD	6	2.3

Table 4 shows associations of socio-demographic characteristics with use of contraceptives. No significant association was observed between education and

contraceptive use ($p = 0.243$). However, users of contraceptives tended to be married ($p < 0.001$), older than 20 years ($p < 0.001$) and with children ($p < 0.001$).

There was no association between contraceptive use and religion ($p = 1.000$). Among users (69.1%) and non users (52.1%), the majority of clients were housewives. Others included pupils and single girls who were probably not in permanent relationships.

Table 4: Determinants of contraceptive use.

CHARACTERISTICS	USERS Total=262		NON-USERS Total =121		X ²	p-value
	N	%	N	%		
Level of education						
None	10	(3.8)	9	(7.4)	0.83	0.243
Primary	132	(50.4)	54	(44.6)		
Secondary and above	120	(45.8)	58	(48.0)		
Religion						
Christians	257	(98.2)	119	(98.3)	4.95	1.000
Others	5	(1.8)	2	(1.7)		
Marital status						
Single	39	(14.9)	48	(39.7)	28.96	<0.001
Married	223	(85.1)	73	(60.3)		
Age (years)						
<20	33	(12.6)	54	(44.6)	48.42	<0.001
20-29	154	(58.8)	46	(38.0)		
30 and above	75	(28.6)	21	(17.4)		
Number of children						
None	10	(3.8)	45	(37.2)	75.10	<0.001
1-3	180	(68.7)	56	(46.3)		
4 and above	72	(27.5)	20	(16.5)		
Occupation						
Formal	13	(5.0)	2	(1.6)	73.51	<0.001
Informal	63	(24.0)	18	(14.9)		
Housewife	181	(69.1)	63	(52.1)		
Others	5	(1.9)	38	(31.4)		

In table 5, clients who had no children were 76 % (OR =0.24, 95 % CI 0.12, 0.47) less likely to have used contraceptive methods compared to clients who had four or more children. Meanwhile, clients with 1 to 3 children were 98 % (OR = 1.98, 95 % CI 1.31, 2.98) more likely to have used contraception than clients who had more children.

In relation to occupation, clients who were in formal employment were 3.99 (95% CI 1.15, 13.88) times more likely to have used contraception than clients in other occupations (pupils and single girls).

Table 5: Multivariate analysis

FACTOR	OR	(95%CI)
NUMBER OF CHILDREN		
None		
1-3	0.24	(0.21,0.47)
4 +	1.98	(1.31,2.98)
	1	
OCCUPATION		
Formal	3.99	(1.15,13.88)
Informal	1.14	(0.57,2.26)
Housewife	0.94	(0.51,1.72)

Table 6 shows that 368 (96.1 %) clients were ignorant about EC and 167 (77.0 %) of health providers had inadequate knowledge. ($X^2=469.9$, $df=2$ $p<0.001$).

Table 6: Respondents knowledge about emergency contraception (EC)

KNOWLEDGE OF DEFINITION OF EC	CLIENTS Total =383		HEALTH PROVIDERS Total =217	
	N	%	N	%
Moderate knowledge	5	(1.3)	33	(15.2)
Inadequate knowledge	10	(2.6)	167	(77.0)
Ignorant	368	(96.1)	17	(7.8)

Table 7 shows that the reason why clients 251 (65.0 %) did not use EC was because of lack of knowledge on the methods. The majority 121 (55.8%) of health providers cited none availability of the methods and 83 (38.2 %) said that it was due to lack of knowledge about the methods.

Table 7: Respondent’s reasons for not using EC

REASON	CLIENTS Total =383		HEALTH PROVIDER Total =217	
	N	%	N	%
Lack of knowledge about the methods	251	(65.5)	83	(38.2)
Non availability of the methods	54	(14.1)	121	(55.8)
Unavailability of situation	78	(20.4)	13	(6.0)

Of the clients who used contraceptives only 5 (1.9 %) had adequate knowledge of the definition of EC (Table 8).

Table 8: Clients’ knowledge of the definition of EC

KNOWLEDGE OF DEFINITION OF EC	NUMBER Total =262 N	PERCENTAGE
Adequate knowledge	5	1.9
Moderate knowledge	10	3.8
Ignorant	247	94.3

In table 9, only 15 clients and 134 health providers had information on EC use. In 10 out of 15 clients, the source of information on EC was the health provider, while 64 (47.8%) of the health providers had the schools of nursing as the source of information. About half (52.2 %) of health providers sourced this information from books and workshops.

Table 9: respondents’ source of information

SOURCE OF INFORMATION	CLIENTS Total =15 N	HEALTH PROVIDER Total =134 N
Health provider	10	0
School	0	64
Friends	2	0
Spouse	3	0
Books/workshops	0	70

Table 10 shows that the majority of clients 368 (96.1%) and health providers 157 (72.4%) did not know any type of EC.

Table 10: Respondents knowledge of types of EC

TYPE OF EC	CLIENTS Total =383		HEALTH PROVIDERS Total =217	
	N	%	N	%
None	368	(96.1)	157	(72.4)
IUD	0	(0.0)	4	(1.8)
PC4	7	(1.8)	26	(12.0)
Ordinary pills	8	(2.0)	30	(13.8)

Table 11 shows that of the clients who were on contraceptives, only 4 (1.5%) had moderate knowledge on when EC can be used compared with 30 (13.8%) health providers who used contraceptives and had moderate knowledge of when EC could be used.

Table 11: Knowledge of when EC could be used among users of contraceptives

KNOWLEDGE OF WHEN EC COULD BE USED	CLIENTS Total =262		HEALTH PROVIDERS Total =217		X ²	P-value
	N	%	N	%		
Moderate knowledge	4	(1.5)	30	(13.8)	206.50	<0.001
Inadequate knowledge	11	(4.2)	118	(54.4)		
Ignorant	247	(94.3)	69	(31.8)		

Two out of 15 condom users had used EC and three out of five clients who used ordinary pills (table 12).

Table 12: Contraceptive use against EC use

CONTRACEPTIVE USE	USERS Total =5	NON-USERS Total =247	
		N	%
Pill	3	128	(97.7)
Condom	2	13	(-)
Injectables	0	106	(100)

Table 13 shows that the majority 3 (3.1%) of clients who used EC were in the age range of 30 years and above.

Table 13: Age specific EC user rates among clients

AGE (Years)	EC USERS Total =5	EC NON-USERS Total =378		TOTAL
		N	%	
17-19 Years	0	87	(100)	87
20-29 Years	2	198	(99.0)	200
30 and above	3	93	(96.9)	96

In table 14 clients and health providers were asked whether they had heard of EC, the majority 200 (92.2%) of health providers had heard of EC while the majority 288 (75.2%) of clients had never heard of EC.

Asked whether EC would be a useful method for the community, the majority of both groups of respondents agreed that EC could be a useful method for the community (p =0.066).

Respondents were asked whether it could be necessary to educate women and health providers on EC use. Significantly, more health providers (98.6%) than clients (90.3%) agreed that it could be necessary to educate women and providers on EC use (p < 0.001). Significantly, more health providers (13.8%) than clients (3.4%) had any beliefs or

taboos concerning EC ($p < 0.001$).

Asked whether respondents would recommend or prescribe EC for adolescents, significantly, more clients 300 (78.3%) than health providers 129 (59.4 %) did agree that they would recommend or prescribe EC for adolescents ($p < 0.001$).

Table 14: Selected EC issues between clients and health providers.

CHARACTERISTICS	CLIENTS		HEALTH PROVIDERS		X ²	P-value
	Total =383		Total =217			
	N	%	N	%		
HAVE YOU HEARD OF EMERGENCY CONTRACEPTIVES?						
Yes	95	(24.8)	200	(92.2)	251.49	<0.001
No	288	(75.2)	17	(7.8)		
DO YOU THINK EC COULD BE A USEFUL METHOD FOR THE COMMUNITY?						
Yes	346	(90.3)	206	(94.9)	3.97	0.066
No	37	(9.7)	11	(5.1)		
DO YOU THINK IT COULD BE NECESSARY TO EDUCATE WOMEN AND HEALTH PROVIDERS ON EC USE?						
Yes	346	(90.3)	214	(98.6)	15.26	<0.001
No	37	(9.7)	3	(1.4)		
DO YOU HAVE ANY BELIEFS OR TABOOS CONCERNING EC?						
Yes	13	(3.4)	30	(13.8)	21.11	<0.001
No	370	(96.6)	187	(86.2)		
WOULD YOU RECOMMEND OR PRESCRIBE EC FOR ADOLESCENTS?						
Yes	300	(78.3)	129	(59.4)	23.32	<0.001
No	83	(21.7)	88	(40.5)		

SECTION B

COMMON CONTRACEPTIVE METHODS

Results of the focus group discussion held with clients and health providers on common methods of contraceptives showed that the majority mentioned oral contraceptives and injectable as methods of contraception. No one mentioned EC.

“Lactation Amenorrhea is a common method used by most breast feeding mothers before one decides to go on any contraceptive methods, but it not very effective because I have seen some women on this method become pregnant”, said one client.

Another client mentioned Norplant but said that she had heard of bleeding problems. In general, clients were knowledgeable about various contraceptives used despite others not using them. All health providers were knowledgeable about common contraceptive methods used. But no one mentioned EC.

WHAT EC IS

With regards to the question of what EC is, most clients believed that it was a method used when one missed her periods. Other had never heard of it and did not know what it was.

“I don’t know what Emergency Contraceptives are because our nurses have never explained or mentioned any ECs to us,” said one client from Masala community. Regarding health providers, half of the group believed that it was a method used to terminate unwanted pregnancy. Generally both clients and health providers were not familiar with the term “emergency contraception”, the moderator had to explain it to them.

TYPES OF EC

Surprisingly, some clients mentioned traditional herbs for delayed menses as types of EC used in the communities.

“My friend used 4 tablets of caffanol (Tablets used for headaches and fever) immediately after unprotected sex to avoid pregnancy and she never conceived”, said one client from

an urban compound .Some health providers mentioned ordinary pills taken in large quantities but not knowing the right dosages. Some health providers had never heard of PC4 (yuzpe regime), but had never seen it used in the clinics. Several health providers and clients remarked that they had never heard of it before or seen it being used in their clinics.

”EC is not ordered by the district,” said one midwife from Chifubu clinic.

Those who had some idea, about EC didn’t have sufficient information.

“I know ordinary pills can be used as EC but I am not sure about the dosage,” said one midwife from Masala clinic.

INFORMATION ABOUT EC

About the need for information concerning EC, clients expressed frustrations regarding the use of EC. EC methods are neither available nor prescribed at their government health centres.

“We have lost lives especially of adolescents because of septic abortions and yet you know of some drugs that can prevent pregnancy to those who are not on regular methods”, said one client from the compound.

There was an appeal for more information to sensitize clients on the use of EC, as it was a new method on the market.

“EC is not available at this clinic and even if it was available I don’t have much information on when to give it and the side effects to expect”, said one midwife from a local clinic.

“I have seen one packet of expired PC4 at our clinic but I have never seen it ordered or prescribed “, said one nurse from a local clinic.

There were also forceful appeals from clients and health providers calling for training of health providers on the use of EC and that the Government should be informed to make EC available in all Government institutions. They insisted that clients should be educated about these methods so that women could make informed decisions about their reproductive health care.

MYTHS OR TABOOS ASSOCIATED WITH EC.

While some clients and health providers did not know much about the use of EC, a few believed that EC use could cause an abortion or deformed babies when it fails to abort.

“EC works by causing an abortion to the fertilized egg in the early stage of pregnancy that is why as a Christian, I cannot prescribe it,” said one midwife from an urban clinic.

But the majority of health providers and clients did not know any myths or taboos associated with EC use because they said it was a new method on the market and the women had no access to it.

BARRIERS TO EC USE

The majority of clients indicated lack of knowledge and information about the existence of EC saying they were hearing about it for the first time.

“Even when we come for family planning our nurses don’t mention EC as a backup method one could rely on in case of failure of her regular method. I know women who had conceived while on a contraceptive pill and they had delivered,” said one client from a local compound.

“Some health providers also lack adequate knowledge and insufficient information about its use to effectively prescribe it to potential clients”, said one client.

“Some health providers have a negative attitude towards EC use thinking that if clients were introduced to EC they would stop using the regular methods in preference to EC. They often forget the consequences of population boom”, said one clinical officer.

Some health providers also supported the use of EC but indicated lack of knowledge and inadequate information about its use.

“There is no clear cut policy from our Ministry concerning EC use, that is why it is neither ordered nor prescribed”, said one midwife.

HOW TO POPULARIZE USE OF EC.

While some clients and health providers were cautious in their support of EC, desiring more information. Most clients and health providers endorsed the use of these methods especially to rape victims, for sexually active unmarried adolescents and for women not in permanent unions. Some health providers who did not support popularizing EC use, feared misuse of EC and those clients would shun the regular method for EC.

“Health providers should be taught about EC use at training schools, workshops and periodic seminars to dispel rumors and myths,” said one enrolled nurse from a local clinic.

Majority of clients urged that there was need for EC in their clinics because routine terminations of pregnancy were not easily available at the hospital. Women with unwanted pregnancies resort to all sorts of things to terminate those pregnancies, which often lead to death.

“Awareness campaigns should be instituted to all women of child bearing age so that eligible clients could demand for the methods,” said one client.

While there was general consensus about the need for EC, health providers believed that they needed to be very strict when the methods are made available at health institution to avoid misuse.

“A deliberate policy should be formulated on the acquisition of EC and all Government health institutions to have sufficient supply”, said one registered nurse from the clinic

CHAPTER FIVE

DISCUSSION

5.0 DEMOGRAPHIC PROFILE OF RESPONDENTS

It is important to know the demographic characteristics of the respondents because it helps to assess the representativeness of the sample. The study revealed that about half of clients fell in the age group of 20-29 years. About a quarter were in the age group of 17 - 19 years. This age distribution is typical of a sexually active reproductive population. About half of health providers were in the age range of 30 years and above. Above twelve percent were in the range of 21 to 25 years that were new recruits who had served for a few years only.

The major users of contraceptives (58.8%) were in the range of 20-29 years while the minority (12.6%) was less than 20 years. This implies that most young women who were just starting a family did not use contraceptives because they preferred to have a certain number of children before they would use contraceptives. The other contributing factors were that young girls did not use contraceptives because they were not in any relationship or were still at school. In Zambia the mean age for girl first sexual encounter is currently 16 years (ZDHS, 2003).

Client respondents included family planning clients, antenatal mothers, mothers who brought their children to under five clinic and adolescents. These women were either married or single.

Seventy seven percent of clients and fifty four percent of health providers were married women. Single women included school going and none school going girls, widows, divorced and those on separation.

Sixty nine percent of clients using contraceptives were full time housewives while a quarter were self employed. The self-employed were mainly marketeers.

Five percent of clients were in formal employment, and this may suggest that most educated women in formal employment might have sought their family planning services in the private sector where probably they accessed emergency contraceptives as well.

The impact of education contributes to delayed marriages. The more time spent in school the lesser chances of marrying early and having more children. Only 3.1% of clients reached college level and above. Five percent of clients never went to school because of various reasons such as distance to school, ignorance and poverty. For health providers, the majority 97.2% went to college and 2.8% reached university level. The minimum entry for enrolled nursing in the 1980s was form three (ten years of schooling) and form five (12 years of schooling) for registered nursing. Presently the minimum entry for both enrolled nursing and registered nursing is grade 12 (12 years of schooling) with five '0' levels. A degree course, Bachelor of Arts in Nursing (BSc nsg) was introduced at the University of Zambia in 1987.

While education remains a stronger predictor of clients' use of family planning (ZDHS, 2003), it was not the case in this study because the major users of family planning were those who never went to school and those who had merely reached primary level of education.

In the current study, both clients and health providers were predominantly Christians. Christians teaching is against abortion, hence providers might find it difficult to advise clients or prescribe EC. Our clients are more likely to decline EC. Christian preaching condemns abortion stating that it is equivalent to murder.

But our findings suggest that providers, who became knowledgeable about and received proper training in the use of EC, could be ready to add them to the contraceptive method mix they offer to women because EC is not tackled in detail in the nursing curriculum. The training in the use of EC should be integrated systematically into nursing and medical school curriculum and included in continuing education seminars offered to practicing health providers.

Clients also believed that when the information was disseminated to health providers and EC were made available in all Government health institutions, awareness campaigns would be instituted to educate all women of childbearing age about its use so that potential users would demand for it. Currently the use of EC was very minimal in both the educated and the uneducated probably because of lack of knowledge and insufficient information and non-availability of methods.

5.1 RESPONDENTS KNOWLEDGE ABOUT CONTRACEPTIVE METHODS

The findings of the study showed that 74% did not have adequate knowledge of contraceptive methods used and yet most of health providers had moderate knowledge. This was quite obvious because health providers learnt about contraceptives during training, while clients depended on health providers to inform them about various contraceptive methods. It was not surprising that only 68.4% of clients were on contraceptives while half of this number was not using any form of modern contraception. This could be that health providers were not providing clients with adequate information.

The study also reveals that the common methods of contraceptives mentioned during profiling were mainly the Pill, Injectables, Condoms, Female Sterilization and Norplant. Other methods such as Emergency contraception, Natural Family Planning, IUD, just to mention a few were not discussed during profiling. This left the client with a limited choice and had no back up method incase of method failure. Reproductive Health and Family Planning topics should be introduced early in primary and secondary education to afford all women a chance to make decisions about their sexuality. Half of the clients using contraceptive methods used the pill. It was the most popular method of contraception followed by injectables. The least used method was Norplant. This was because clients on Norplant came for review only when necessary and were difficult to capture in this study. Nevertheless, the study was in agreement with the Contraceptive Needs Assessment Survey (1995) that revealed that the pill and sterilization were the common methods of contraception.

5.2 KNOWLEDGE OF EC IN WOMEN

Although EC was one of the family planning method mix, it was not widely known by clients.

Lack of knowledge about the existence of EC use lead to lack of demand for the method. Ninety-six percent of clients were ignorant about EC use, 2.6% had inadequate knowledge and only 1.3% of clients had moderate knowledge and had used EC. Therefore, the use of EC was very minimal amongst women of childbearing age. These results were in agreement with the statement that the majority of women in developing countries have no access to any method of emergency contraceptives and yet the most important intervention is to offer women any of the currently available post-coital contraceptives, safe and effective regime would be better than nothing (WHO, 1999). It was also in line with findings of a study conducted in South Africa, which revealed that only 22 percent of clients had heard of EC and only nine had used the method. (PPASA, 1998)

The study also reveals that 90.3% clients believed that EC would be a useful method for the community and that it would be necessary to educate women on EC use if we have to reduce the number of unplanned pregnancies in the community. This showed that there was a relationship between clients demand for EC for the community and providers demand for EC for the community.

This may indicate that the majority of women who sought termination of pregnancy might have used the EC pill if they had known about it and had it available at urban health centres. Identification of potential users of EC is necessary and the importance of educating the whole community should be recognized. (Moss, 1996)

The majority of respondents 94.4% using contraceptives were unable to define emergency contraception. That it was a method used by women within a few hours or few days following unprotected sex. Meanwhile 95.8% of clients did not know any type of EC or when it can be used.

5.3 HEALTH PROVIDERS' KNOWLEDGE OF EC

The study showed that even health providers did not have sufficient knowledge on EC use. A higher percentage of health providers had inadequate knowledge on EC use and only a quarter had moderate knowledge.

Studies have demonstrated that in developing countries providers lack knowledge and have misconceptions about Emergency pill especially when they are not available as a dedicated product. Even providers who know about the method often do not offer it to eligible women. This was in line with the findings of the study in Ghana, which revealed that one third of 323 interviewed providers had heard of EC but none knew how to prescribe it correctly. Therefore, in developing countries, EC is currently not fully integrated into reproductive health services (FHI, 1997).

Health providers needed guidance on how to provide information on EC in a way that promoted contraceptive use before and during sex, but should unforeseen event occur, allow teenagers or women to act, to prevent unplanned pregnancies. Although EC could significantly reduce the incidence of unintended pregnancies and the consequent need for abortions, its potential would not be realized unless women have better access to clinicians who can prescribe EC pills (Trussel, 2000). The study revealed that only 5% of health providers had prescribed EC for clients citing non-availability of the methods, lack of adequate knowledge and information as the main reasons. Therefore, health providers need special training in family planning with a special emphasis on EC.

5.4 INFORMATION ABOUT EC

The few respondents who knew about EC were asked about the source of their information. Some clients indicated health providers as their source during family planning counseling. Meanwhile health providers indicated books and workshops as their source of information. While some clients and health providers did not know much about the use of EC, a major misunderstanding that needed to be corrected was the mistaken belief that EC methods acted as abortifacient. For this reason, factual information should be widely disseminated stating clearly what EC was and what it was

not. In this study, 48% of health providers believed that EC was abortifacient. About one-fifth of health providers believed that it caused deformed babies when it failed to abort. Majority of clients and health providers did not have any myths or taboos concerning EC use because they said it was a new method on the market and most women had no access to the method.

The majority of clients and health providers thought that EC would be a useful method for the community. They also thought that it would be necessary to educate women on EC use. But some providers were worried that telling clients about EC pills could encourage women to use EC routinely instead of using it as a backup method only.

5.5 PREVENTING UNWANTED PREGNANCIES AMONG THE ADOLESCENTS

The study revealed that only 38% of clients under the age of 20 used contraceptives. EC was useful in preventing unwanted pregnancies in adolescents, and there was no evidence that knowledge of EC methods had the effect of encouraging sexual activity among young people. It would also serve as a young woman's introduction to a regular method or it would bring sexually active young people into family planning clinics where they would receive other services and counseling. (Consortium for Emergency Contraception, 1997)

The results of the current study revealed that majority of clients and health providers would recommend adolescents for EC. They believed that many unwanted pregnancies occurred during adolescence, when young women and their partners became sexually active before they were fully aware of the need for contraception. This was in agreement with the WHO statement that adolescents are denied of education on sex, family life. Moreover, the related education that they are given is inadequate and fails to take account of their real needs.

EC is often a solution to adolescents who face problems of condom rupture or seepage because of lack of experience (WHO, 1998). Some clients 21.7% and 40.6% health providers who were against EC for adolescents feared that it would encourage

immorality. But studies have shown that EC does not encourage adolescents to engage in sex and that unwanted pregnancy has psychosocial and health consequences for the young mother and her newborn baby (WHO, 1998). Generally, clients stressed that there was need for EC in clinics because routine termination of unwanted pregnancies were not easily available at the hospitals, and that was why some women resorted to unconventional methods of terminating unwanted pregnancies.

It was also agreed that EC should be made available at Youth Friendly Services for adolescents and that a qualified health provider to be in charge to provide counseling services.

5.6 ACCESSIBILITY AND AVAILABILITY OF EC

Most health providers indicated that EC was not available at their local clinics and the majority of client respondents had never used any EC. About a quarter of health providers who agreed that EC was available at their urban clinics, half of them mainly talked about the ordinary pills, 43.3% talked about the expired Pc4 found at some clinics and 6.7% talked about the Loop. EC may not be accessible because some methods that can be used in emergency situation are not packaged or labeled specifically for this purpose and may not be granted regulatory approval. Different regimes for normal contraceptive use and for emergency use, utilization and dosage may be confusing for some providers and users leading to poor compliance and reduced efficacy (FHI, 2001).

Health providers and clients agreed that there was need for providers to undertake special training in provision of EC and that the Government should be informed to make EC available in all Government institutions.

There was an appeal for more information to sensitize clients on the use of EC, as it was a relatively new method on the market. Clients believe that if all women are sensitized about EC, an eligible client could make an informed choice on whether to have unplanned pregnancy or not.

Health providers believed that if EC are made available at their health institutions, they could be very strict with prescriptions in order to avoid misuse. This agrees with the statement that providing contraceptive methods through the clinics offers the most control to providers and less access to women because some women may find it cumbersome going back to the clinics whenever they have unprotected sex. This was in agreement with the study conducted in Lusaka, Zambia, that sought to determine which emergency contraceptive strategy was most effective at the lowest cost. It revealed that 80 percent of women who needed to use emergency contraceptives and who had the pills at hand did use them within 24 hours after unprotected sex. The study also found a need for better emergency contraception counseling (FHI, 2001).

Providers expressed concern at non availability of the methods at their institutions calling for formulation of a deliberate policy to ensure that all urban health centres are equipped with at least one method of EC especially PC4 which is specifically packaged as EC.

CHAPTER SIX

CONCLUSION

There are some socio demographic characteristics that influence the use of contraceptives. These are: Number of children and occupation. Clients who had no children were 76% less likely to have used contraceptive methods compared to clients who had four or more children. Meanwhile, clients with 1 to 3 children were 98% more likely to have used contraceptives than clients who had four or more children. In relation to occupation, clients who were in formal employment were 3.99 times more likely to have used contraceptives than clients that were in other occupations such as housewives and those in informal sector. Therefore, reproductive health and family planning topics should be introduced during primary and secondary education.

Emergency contraception is useful in preventing unwanted pregnancies especially in adolescents, and on the other hand, the need for EC may be the stimulus that can bring adolescents into contact with the health care providers, thus providing opportunities for counseling on responsible sexual behavior, contraception, and prevention of STD, HIV and AIDS.

The study findings, showed lack of knowledge and information about the existence of the methods as the main reasons for non-use of EC. The majority of respondent had shown interest in the method and would like to be educated on its use.

6.0 RECOMMENDATIONS

- 1) Reproductive health and family planning topics should be introduced during primary and secondary education.
- 2) Health providers need special training in family planning with special emphasis on emergency contraception.
- 3) Awareness campaigns should be instituted in all health centres to sensitize women of childbearing age about EC.

- 4) EC should be part of the family planning method mix and identification of potential use should be done in case of failure of their regular methods.
- 5) A deliberate policy should be made of EC especially PC4 which is specifically packaged as EC

ANNEX 1

REFERENCES

- 1) Abraham J, H. Survey Methods in Community Medicine, 2nd ed. Edinburgh: Churchill Livingstone, 1990:230.
- 2) Ary A. Emergency Contraception as the alternative method to abortions. *Contraception* 1994; 2:76
- 3) Ashford L, Makinson J. A reproductive Health in Policy and Practice: Case studies from Brazil, India, Morocco and Uganda. Population Reference Bureau, 1999; 1:75-76.
- 4) Ashford L.S. New Population Policies: Advancing Women's Health and Rights. Washington: Population Reference Bureau, 2001; 56:14-17
- 5) Baird D, Trussell J. Measuring the Emergency Contraception Efficacy, *Contraception* 1993; 49:102.
- 6) Bouvier I. World Population: Challenges for 21st Century. Santa Ana, 1999; 17-19.
- 7) CBoH, Integrated Technical Guidelines for Front line Workers; Lusaka, 1997.
- 8) Central Statistics, CBoH, Zambia Demographic and Health Survey: Calverton, Maryland, 2001-2002:273
- 9) Falk G, and Falk L. *Contraception*. 2001; 63:34
- 10) Family Health International. Emergency Contraceptive Pills, Network. 2001; 21:4-17
- 11) Family Health International. Emergency Contraceptive Pills, Network. 1996; 17: 5-10
- 12) Gichangi P. Knowledge, Attitudes and Practices regarding Emergency Contraception among Nurses and Nursing Students in Kenya: *Contraception*, 1999; 59:107
- 13) Hatcher R. *Contraception*. 2nd Ed. New York: Irvington publishers Inc., 1994:2217
- 14) Jackson L. Knowledge and Willingness to use Emergency Contraceptives. *Contraception*. 2000; 61:78
- 15) Karen A. Emergency Contraceptive pills, *Family Planning Perspectives*, 1997; 23:97
- 16) Nganjo S. KAP on Emergency Contraceptives among providers and clients: MMed Thesis, University of Zambia, 1999.

- 17) Nguyen T, Ellertson C, Yukolsiri S, Thai L. International Family Planning Perspectives. Alan Guttmacher Institute. 1997: 68-69
- 18) PPASA. Popularisation of Emergency Contraception. Sexual Reproductive Health Bulletin. 1996; 3:10
- 19) PPASA. Contraceptive Focus. Sexual and Reproductive Health, Bulletin. 1998; 5:10.
- 20) Smith J. Contraception. International Journal of Health, 2000; 2:98
- 21) Trussell J. Emergency Contraception use and evaluation of barrier contraceptives. Contraception 1998; 58:379
- 22) UNDP. Women and Reproductive Health Social Science Research and Policy briefs. UNDP 1999; 2:10
- 23) UNFPA. Emergency Contraception. Outlook. 2002; 1:8
- 24) UNICEF. The Emergency of the Adolescent in Zambia, Lusaka: UNICEF, 1996:20
- 25) UNICEF. Safe Motherhood in Zambia. A situation Analysis: UNICEF, 1994:24
- 26) WHO. Emergency Contraception. A guide for Service delivery, Geneva: WHO, 1998; 7-10
- 27) WHO. Expanding Family Planning Options: Zambia Contraceptive needs Assessment, Geneva, 1995.
- 28) WHO. Improving Access to Quality Care in Family Planning. Medical Eligibility Criteria for Contraceptive use. Geneva: WHO, 2000:54
- 29) WHO. Needs Assessment. Safe Motherhood in Zambia. Geneva: WHO, 1997, 96:45
- 30) WHO. Selected Practice, Recommendations for Contraceptive use. Geneva: WHO, 2000; 28:35.
- 31) Will G. New Estimates of the Effectiveness of the Yuzpe Regime of EC. Emergency Contraception, 1997; 2:10
- 32) Zhouliyin B. Knowledge, Attitudes and Practices of Health providers on Emergency Contraceptives in China. Contraception, 2001; 4:28.

ANNEX 2

INFORMED CONSENT FOR CLIENTS

Dear participants,
The purpose of this study is to determine factors associated with non-use of Emergency contraception. EC is a method of contraception that a woman uses immediately after Unprotected sexual intercourse. It is also a back up method used when a regular method fails. EC pills are used within 72 hours after unprotected sex to protect the woman from conceiving unplanned pregnancy. Data is required from you on knowledge and myths associated with the use of Emergency Contraception.

VOLUNTARY PARTICIPATION

Your participation in the study and giving consent does not mean violation of your rights. You are free to withdraw from the study at any time you wish to do so. You have the right to ask questions or seek any clarification from the researcher whenever you wish to do so. Your withdrawal will not affect the standard of care, which you normally receive at this health centre without participation.

RISK AND BENEFITS

There is no risk involved in this research. This is a questionnaire-based research where questions will be asked regarding EC, which avoids unwanted pregnancies. There are no direct benefits to you by participating in this study, but the knowledge and information you will gain by venture of your participation will help you protect yourself from unwanted pregnancies. There is no monetary gain.

CONFIDENTIALITY

During your participation some sensitive questions will be asked pertaining to reproductive health, and also information gathered during interview are very private matters. Care will be taken to preserve your privacy and keep all information confidential. The researched information will be disseminated to relevant authority but no such information will be released which will lead directly to you.

ACCEPTABILITY TO PARTICIPATE

By now you have understood the nature of this research and its probable implications. If you desire to participate in this study, please put your signature or thumb print where indicated.

Signature or thumbprint of
participant_____Date____.
Signature of witness
_____Date_____

If you wish to seek any clarification, please call at the following address:

Mrs Jenipher C Mijere
Ndola Central Hospital
P/A Ndola
NDOLA

ANNEX 3

QUESTIONNAIRE FOR CLIENTS

**SECTION A: DEMOGRAPHIC DATA
USE**

FOR OFFICIAL

1. Sex []

2. How old were you on your last Birthday? []

a) 20-29 years

b) 30-39 years

c) 40 and above years

3. Marital status:

a) Married []

b) Widowed

c) Single

d) Divorced

e) Separated

4. What is your Religion? []

a) Catholic

b) Protestant

c) Moslem

d) Any other, Specify

5. Level of Education []

a) None

b) Primary

c) Secondary

d) College and above

6. Occupation: []

a) Formal employed

b) Self employed

c) House Wife

d) Any other specify

7. How many children do you have?

- a) None
 - b) 1-3
 - c) 4-6
 - d) 7 and above
- []

8. Is your home within walking distance for the Health Centre/Hospital? []

- a) Yes
- b) No.

9. If your answer is No to Question 8, what mode of transport do you use?

- a) Bicycle
 - b) Mini-bus
 - c) Taxi
 - d) Any other for of transport – specify
- []

10. How much does your transport cost?

- a) Less than K1, 000
 - b) Less than K3, 000
 - c) Less than K5, 000
 - d) Less than 10,000
- []

SECTION B

KNOWLEDGE ABOUT EMERGENCY CONTRACEPTIVES

11. Are you on contraception?

- a) Yes
 - b) No
- []

12. If the answer to question 11 is yes, what type of contraception?

- a) Pill
 - b) Condom
 - c) Injectibles
- []

13. If the answer to question 11 is no, what are using to avoid unwanted pregnancies?

- a) Abstinence
 - b) Emergency Contraception
- []

14. What is Emergency Contraception?

- a) A number of methods used when she misses her period. []
- b) A number of methods used to terminate unwanted pregnancies.
- c) A number of methods used by women within a few hours or a few days following unprotected Sex.
- d) A dual methods used to avoid pregnancy.

15. What type of EC do you know?

- a) IUD insertion 5 days after unprotected Sex.
- b) Combined oestrogen- progesterone pill (YUZpe) PC 4 []
- c) Progesterone – only pill
- d) Any other Specify.

16. Do the pills protect against STD/HIV? []

- a) Yes
- b) Not at all
- c) At times
- d) I do not know

17. Where did you learn or hear about emergency contraceptives? []

- a) Clinic by health providers
- b) At School
- c) Friends
- d) My Husband/Spouse

18. Have you ever used any emergency contraceptives?

- a) Yes []
- b) No

19) When can you use emergency contraceptives?

- a) When a condom breaks
- b) When one is raped
- c) When one misses 3 or more contraceptive pills and has unprotected sex []
- d) Sex without any contraceptives.

SECTION C ATTITUDES/PERCEPTIONS TOWARDS USE OF EMERGENCY CONTRACEPTIVES

20. When you come for Family Planning are you told about Emergency Contraceptives?

- a) Yes
- b) No.

[]

21. Are you given Emergency Contraceptive method to take home for failure of your regular method?

- a) Yes
- b) No

[]

22. If the Answer to Question 18 is yes what type of Emergency Contraceptives are you given?

- a) Ordinary pills
- b) Combined oral pill (PC 4).

[]

23) If the answer is no, why not?

- a) I couldn't take it
- b) I don't know

[]

24) Do you think Emergency Contraceptives could be a useful method for the Community?

- a) Yes
- b) No.

[]

SECTION D

MYTHS/TABOOS

25. How does Emergency Contraception Work?

- a) Prevents Pregnancy
- b) Induces abortions
- c) Prevents pregnancy & induces abortions
- d) I don't know.

[]



26) Would you advice your friend who has unprotected Sex without contraception to go for Emergency Contraceptives.

a) Yes

b) No

[]

27) Do you have any beliefs or taboos concerning Emergency Contraceptives?

a) Yes

b) No.

[]

28) Do you think it could be necessary to educate women on the use of EC?

a) Yes

b) No

[]

Thank respondent before leaving.

END OF INTERVIEW

ANNEX 5

INFORMED CONSENT FOR HEALTH PROVIDERS

Dear participants,

The purpose of this study is to determine factors associated with non-prescription of Emergency contraception. EC is a method of contraception that a woman uses immediately after unprotected sexual intercourse. It is also a back up method used when a regular method fails. EC pills are used within 72 hours after unprotected sex to protect the woman from conceiving unplanned pregnancy. Data is required from you on knowledge and myths associated with the use of Emergency Contraception.

VOLUNTARY PARTICIPATION

Your participation in this study and giving consent does not mean violation of your rights. You are free to withdraw from the study at any time you wish to do so. You have the right to ask questions or seek any clarification from the researcher whenever you wish to do so. Your withdrawal will not affect your work or performance at this hospital.

RISK AND BENEFITS

There is no risk involved in this research. This is a questionnaire-based research where questions will be asked regarding EC, which prevents unwanted pregnancies. There are no direct benefits to you by participating in this study, but the knowledge and information you will gain by venture of your participation will help you prescribe or protect yourself from unwanted pregnancies. There is no monetary gain.

CONFIDENTIALITY

During your participation, some sensitive questions will be asked pertaining to reproductive health and also information gathered during interview are very private matters. Care will be taken to preserve your privacy and keep all information confidential. The researched information will be disseminated to relevant authorities but no such information will be released which will lead directly to you.

ACCEPTABILITY TO PARTICIPATE

By now you have understood the nature of this research and its probable implications. If you desire to participate in this study, please put your signature in the space provided.

Signature of participant _____ Date _____

Signature of witness _____ Date _____

If you wish to seek any clarification, please call at the following address:
Mrs Jenipher C Mijere
Ndola school of Nursing
P/A Ndola
NDOLA
Phone no 096452367

ANNEX 6

CONFIDENTIAL

FACTORS CONTRIBUTING TO NON-PRESCRIPTION OF EMERGENCY CONTRACEPTIVES AMONG HEALTH PROVIDERS IN NDOLA URBAN

Area Code: _____ District Code: _____ Date: _____

Name of Interviewer: _____

INSTRUCTIONS TO RESEARCH ASSISTANTS

1. Introduce yourself before starting the interview.
2. Explain the purpose of the study and ask permission to interview the participant.
3. Make the respondent sign the consent before you start the interview.
4. Assure confidentiality.
5. Participants should not be forced to be interviewed.
6. Where the respondent is reluctant or unwilling to take part, politely leave her/him.
7. Do not write the name of the respondent on the questionnaire.
8. Write the responses in the spaces provided.

Thank your respondent at the end of each interview.

QUESTIONNAIRE FOR HEALTH PROVIDERS

SECTION A:

DEMOGRAPHIC CHARACTERISTICS

FOR OFFICIAL USE ONLY

1. Sex

a) Male

[]

b) Female

2. Age on your last Birthday?

a) Under 20 years

b) 20-29 years

c) 30 and above

[]

3. Marital status

a) Married

b) Widowed

c) Single

d) Separated

[]

4. What is your religion?

a) Catholic

b) Protestant

c) Moslem

d) Any other specify

[]

5. Level of education

a) Grade 9

b) Grade 12

c) College

d) University

[]

6. Occupation

- a) ZEN/ZEM []
- b) Clinical Officer
- c) RN/RM
- d) Doctor

7. Number of Children

- a) Non []
- b) 1-3
- c) 4-6
- d) 7 and above

8. Which is your workplace?

- a) Health Centre.
- b) Hospital
- c) Which department: []
- d) MCH
- e) Family Planning Clinic
- f) Obs and Gynae
- g) General Wards

9. For how long have you worked in this department? []

- a) Less than one year
- b) 1- 2 years
- c) 3-4 years
- d) 5 years and above

10. Extra training received in

- a) Reproductive health
- b) Family Planning []
- c) Emergency contraception
- d) None

SECTION B

KNOWLEDGE ABOUT EMERGENCY CONTRACEPTIVES METHOD

11. What is Family Planning?

- a) A voluntary decision made by an individual or couple on the number of children they wish to have and when to have them
- b) A voluntary decision made by the woman only on the number of children she wants to have
- c) A method of limiting the number of children one wants to have
- d) Not having any more children

13. What are the types of Family Planning methods?

- a) Combined oral contraceptives
- b) Progesterone only methods-pill, injectibles, implants []
- c) IUD
- d) LAM
- e) Natural Family planning
- f) Condoms

14. What is emergency contraception (Emergency Contraceptives)?

- a) A method a woman can use when she misses her period []
- b) A method used to terminate unwanted pregnancy
- c) Methods used by women within few hours or few days following unprotected sex
- d) Dual method used to prevent pregnancy

15. How do the pills work?

- a) Prevent pregnancy by interrupting women's reproductive cycle. []
- b) Disturbs pregnancy by causing pain
- c) I don't know

16. What are the 3 types of Emergency Contraceptives? []

- a) Condom
- b) Loop
- c) PC 4
- d) High dose of ordinary pills.

17. When can Emergency Contraceptives be given?

- a) Lactational amenorrhea []
- b) Sexual abuse

- c) At least 4 weeks amenorrhea
- d) Condom rupture
- e) Immediate unprotected sex
- f) Coerced Sex without any form of contraception

18. When should Emergency Contraceptives Pills be used?

- a) Up to 72 hours of unprotected sex
- b) 125 hours after unprotected sex []
- c) 90 hours after unprotected sex
- d) A month after unprotected sex

19. What are the side effects?

- a) Nausea and vomiting []
- b) Fever
- c) Headache
- d) Diarrhea

20. Where did you learn about Emergency Contraceptives? []

- a) At training School.
- b) In-service training
- c) Workshop
- d) Books, bulletins
- e) No where

21. Do you need further training on Emergency Contraceptives?

- a) Yes []
- b) No

SECTION C

ATTITUDES/PERCEPTIONS TOWARD PRESCRIPTION OF EMERGENCY CONTRACEPTIVES

22. Do you think emergency contraceptive is important? []

- a) Yes
- b) No

23) Have you ever prescribed Emergency Contraceptives or recommended your client for Emergency Contraceptives.

- a) Yes
- b) No []

24) Is Emergency Contraceptives available at this Health Centre Hospital?

- a) Yes
- b) No []

25) If the answer is yes, what type?

- a) As loop
- b) As PC4
- c) As combined pill
- d) Any other specify []

26) Would you recommend EC for Adolescent?

- a) Yes
- b) No. []

27. If the answer to question 26 is yes, what would be the reasons?

- a) To prevent unplanned pregnancies
- b) To reduce the number of septic abortions
- c) To reduce the number of damped babies
- d) Don't know []

28. If the answer to question 26 is no, what would be the reasons?

- a) It encourages adolescents to engage in casual sex
- b) It causes abortion
- c) It is against my religion
- d) Any other specify []

MYTHS/TABOOS ASSOCIATED WITH EMERGENCY CONTRACEPTIVES

29) How does EC work?

- a) Causes abortion
- b) Causes sterility []

- c) Causes deformities
- d) Loss of libido
- e) No answer

30) If a woman who is pregnant takes EC it can cause:

- a) Nothing at all []
- b) Miscarriage
- c) Deformities/Congenital abnormalities
- d) Ruptured uterus

31. Whom can you recommend for EC?

- a) Adolescents []
- b) Married women only
- c) Any one with the need of it.
- d) Unmarried women only
- e) None

32) Do you have any traditional beliefs or taboos concerning EC use?

- a) Yes.
- b) No []

SECTION D

AVAILABILITY/ACCESSIBILITY

33. How is EC available at this health centre/ hospital?

- a) As normal pills
- b) As PC-4 []
- c) As loops
- d) Not available

34. How often are they available?

- a) All the time []
- b) Occasionally
- c) Rarely available
- d) Not at all

35. Who prescribes them?

- a) Family planning nurses []
- b) Nursing Sister
- c) Clinical Officers
- d) Doctors
- e) No one

36. Are there barriers to prescription of the emergency contraceptive methods?

- a) Yes
- b) No []

37. If the answer to question 36 is yes, what are the barriers?

- a) None availability of the methods []
- b) Restricted to certain prescribers
- c) Insufficient information
- d) Lack of trained personnel

38. Do you think you need extra training in EC?

- a) Yes []
- b) No

END OF INTERVIEW

THANK YOU.

ANNEX 8

FOCUS GROUP DISCUSSION GUIDE

INTRODUCTION:

- 1) Welcome the participants warmly
- 2) Introduce yourself and the recorder to the group. Ask the participants to introduce themselves.
- 3) Explain the purpose of the discussion
- 4) Assure participants of the confidentiality of information and encourage them to feel free in the discussion

TOPICS FOR DISCUSSION

Definition of EC

Knowledge about EC

Advantages of EC

Types of EC

Availability and Accessibility of EC

Myths/perceptions about use of EC

Barriers to use /prescription of EC

Suggestions on how to popularise use of EC



The University of Zambia
DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Telephone: 290258/291777 Ext. 2208
Fax: +260-1-290258/253952
E-mail: Director@drfs.unza.zm

P O Box 32379
Lusaka, Zambia
Your Ref:
Our Ref:

6 November 2003

Ms Jenipher C Mijere
C/o Department of Community Medicine
School of Medicine
UNZA

Dear Ms Mijere

RE: MASTER OF PUBLIC HEALTH (MPH) RESEARCH PROPOSAL

Your research proposal for the Master of Public Health (MPH) entitled:

"The reasons why women in Ndola Urban are not using emergency contraceptives"

was presented at the 82nd meeting of the Board of Graduate Studies held on Friday, 31st October, 2003.

I am pleased to inform you that the proposal was approved by the Board. Your Supervisor is Prof. S. Siziya.

I wish you every success in your studies.

Yours sincerely

Professor Shamitiba B Kanyanga
DIRECTOR

cc Dean, School of Medicine
 Head, Department of Community Medicine
 Assistant Dean (PG), School of Medicine
 Prof. S. Siziya, Department of Community Medicine
 Assistant Registrar (Graduate Studies)



THE UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE

Telephone: 252641
Telegram: UNZA. Lusaka
Telex: UNZALU ZA 44370

Fax: + 260-1-250753

Department of Community Medicine
P.O. Box 50110
Lusaka, Zambia

Your Ref:
Our Ref:

22 April 2003

The Executive Director
Ndola Central Hospital
Postal Agency
NDOLA

RE: Mrs Jenipher Mijere

The above named is a Master of Public Health student at the University of Zambia, School of Medicine. She is currently collecting data for her dissertation as part of the requirements for the award of the said degree.

Kindly assist her with information she may be requesting for to enable her proceed with her research. The title of the research for which information is being sought is "*The reasons Why Women in Ndola Urban are not using Emergency Contraceptives*". The information so collected will be used solely for academic purposes and not for publication.

Anticipating your valuable support in this regard.

Yours sincerely,
Department of Community Medicine

Dr S H Nzala
MPH COURSE COORDINATOR



Ndola District Health Board

Naidu Close Kanini
P.O. Box 70672
Ndola - Zambia

All Communications to be addressed to
District Director of Health

Telephone : 610306
Telefax: 612819
Cell: 095 707343

29th April 2003

Mrs Jenipher Mijere
Ndola

Dear Madam

PERMISSION TO CONDUCT RESEARCH IN NDHMT HEALTH CENTRES

Reference is made to your letter dated 22nd April 2003 in which you requested for permission to conduct research in Ndola Urban.

This letter serves to inform you that permission has been granted to conduct the research. Furthermore, all the Health Centres will be communicated to so that maximum support is availed.

Wishing you all the best as you conduct the research.

Yours faithfully

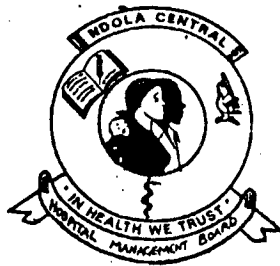
DR. M. K. LEMBALEMBA
DISTRICT DIRECTOR OF HEALTH

UNIVERSITY OF ZAMBIA LIBRARY

ACC. No.

CALL No.

20030164



NDOLA CENTRAL HOSPITAL MANAGEMENT BOARD

**POSTAL AGENCY
NDOLA**

**TEL: 611585-9
FAX: 612204/612362
e-mail : nch@zamnet.zm**

29th April, 2003

Mrs. J. Mijere
Department of Community Medicine
P.O. Box 50110
LUSAKA

Dear Sir

RE: RESEARCH ON MASTER PUBLIC HEALTH PROGRAMME

Reference is made to the letter dated 22nd April, 2003.

Please be informed that management has no objection for you to come and carry out a research at our Institution for your degree programme.

We wish you success in your research.

Yours faithfully
NDOLA CENTRAL HOSPITAL



**DR. W. CHILENGWE (Maj)
DIRECTOR CLINICAL SERVICES**