HEALTH PROVIDERS' ATTITUDES, PRACTICES AND THE FACTORS INFLUENCING THEIR MANAGEMENT OF UNWANTED PREGNANCY IN DAR ES SALAAM REGION -TANZANIA.

By

Angela Nguluma Thomas

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

November, 2007

CERTIFICATION

The undersigned certifies that she has read and hereby recommends for acceptance a dissertation entitled **Health Providers' Attitudes, Practices and Factors Influencing the Management of Unwanted Pregnancy in Dar es Salaam Region-Tanzania,** in fulfilment of the requirements for the degree of Master of Public Health of the Muhimbili University of Health and Allied Sciences.

Dr Asia K. Hussein.

(Supervisor)

Date: 8/11/07

DECLARATION

AND

COPYRIGHT

I, **Angela Nguluma Thomas,** declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature _____

This dissertation is copyright material protected under the Berne Convention, the Copyright Act 1999 and other international and national enactments, in that behalf, on intellectual property. It may not be reproduced by any means, in full or in part, except for short extracts in fair dealings, for research or private study, critical scholarly review or discourse with an acknowledgement, without the written permission of the Directorate of Postgraduate Studies, on behalf of both the author and the Muhimbili University of Health and Allied Sciences.

ACKNOWLEDGEMENT

I am grateful to the Ministry of Health and Social Welfare for the sponsorship, which enabled me undertake the Master of Public Health course.

Sincere thanks to my supervisor Dr.A.K.Hussein for her guidance and advice during the proposal writing, conduction of my research and writing of this dissertation. Furthermore, I would like to extend my gratitude to Dr. D. Kakoko who had been my mentor during the course, Mr. C.K. Makwaya and Mr. F. Mayunga of the Department of Biostatistics for their assistance, tolerance and always being ready to help.

Thanks also go to my research assistants Sr. Salome, Sr. Ndunguru, Dr. Alcard and Dr. Mselle.

I would also like to extend my gratitude to all my colleagues who undertook the Master of Public Health course during the academic year 2006/07 for their cooperation and experience sharing during course.

Lastly but not least, I would like to thank all the health providers who willingly agreed to participate in this study.

DEDICATION

I dedicate this dissertation to my daughters Mercy-Noella and Pauline for their prayers and moral support during my course.

ABSTRACT

Health providers are faced with an ethical dilemma when approached by a woman with an unwanted pregnancy. This crisis is not only an individual problem, but also that of the woman's immediate family and the community at large.

This was a cross sectional comparative quantitative study conducted in the public and private the health facilities located in the three municipalities (Ilala, Kinondoni and Temeke) of Dar es Salaam region including the Muhimbili National hospital for o the month of July 2007.

The main objective of the study was to determine health providers' attitudes, practices and the factors influencing their management of unwanted pregnancy in the Tanzanian context.

Stratified random sampling was done to select the public and private health facilities that were included in this study. Once a health facility was selected, all eligible health providers were requested to participate in the study, those who agreed to participate in the study i.e 300 health providers were given the self administered questionnaire which had open and closed ended questions to fill within a 24 to 48 hours period. Follow up was done for those who could not fill the questionnaire within the 48 hours period. Coding of the open-ended questions was done before the data entry. Data cleaning and analysis were done using Epi info 6 packages.

A total of 267 health providers, 76.0% of whom were from public and 24.0% were from private health facilities returned filled questionnaires.

Overall 86% of the respondents were from hospitals the and the rest were from health centers, Nurses formed the highest proportion (64.4%), Clinical Officers, Medical Officers and Obstetricians/gynecologists each contributed about 11% while 3.7%were Assistant Medical Officers.

Almost three quarters (74%) of the respondents reported to have been approached by women with unwanted pregnancy sometimes during the past one year prior to the study with an average of 7 women per provider. The majority (87.6%) of the health providers reported to have counseled the women to continue with the pregnancy to term while only 8% offered termination of pregnancy (TOP). About 17.3% of the respondents reported that they referred the women for termination of pregnancy elsewhere.

The majority 99/110 (90%) of the respondents who responded to the question of on what factors would influence their decision to offer TOP reported the reason given by a woman for seeking TOP as the main factor. The most common reason given for not offering TOP service was because of morals and religious values (105/197 or 67.3%), followed by the restrictive abortion law (90/197 or 57.7%).

Overall 88% of the respondents were of the opinion that unwanted pregnancy was a health problem of public importance and 73% reported unwanted pregnancy management to be a major challenge in their practice. A total of 165

(62%) respondents were aware of the existence of the abortion law in Tanzania. There was 123/267 (46.1%) respondents who were of the opinion that the restrictive abortion law affected their clinical practice in the management of unwanted pregnancy. The study respondents gave the following suggestions for reducing the magnitude of unwanted pregnancy: provision of health education 70%, availability and accessibility of family planning services 56.6% and instilling the cultural and religious values 25.5%.

A total of (90/165 or 54.5%) of those who were aware of the existence of the Tanzania abortion law were of the opinion that a less restrictive abortion law was going to lead to reduction of the magnitude of unsafe abortion.

In order for Tanzania to reduce of maternal mortality by three quarters by the year 2015 such as achieve the MDG 5 there is a need to critically analyze various ways of reducing the magnitude of unwanted pregnancy, which leads to unsafe abortion with all its complications. One of these includes a review of the existing restrictive abortion policy in addition to creation of more management options for the unwanted pregnancy

There is a need to undertake a bigger study to include more health providers from other parts of the country and the community to get their views and opinions on how to reduce unwanted pregnancy, as it cannot be eliminated in real life.

TABLE OF CONTENTS

TITLE **PAGE**

Certification..... ii

Declaration..... iii

Copyright..... iii

Acknowledgements.....iv

Dedication.....v

Abstract..... vi

List of tables..... xii

List of abbreviations..... xiii

Definition of operational concepts..... xiv

1.0 Introduction..... 1

1.1 Background..... 1

1.2 Statement of the problem..... 5

1.3 Rationale..... 7

1.4. Research questions..... 8

1.5. Study objectives..... 8

2.0 Literature review..... 10

3.0 Methodology..... 17

3.1 Study area..... 17

3.2 Study design..... 18

3.3 Study population..... 18

3.4 Sample size calculation..... 18

3.5 Sampling procedures..... 20

3.6 Study variables.....21

3.7 Data collection tool..... 22

3.8 Pre-testing of the questionnaire..... 22

3.9 Data collection method..... 23

3.10 Data management and quality assurance..... 23

3.11 Data processing and analysis. 24

3.12 Ethical clearance. 24

4.0 Results..... 26

5.0 Discussion..... 43

6.0 Conclusion and recommendations 55

6.1 Conclusion..... 55

6.2 Recommendations..... 56

References 58

Appendices:

Appendix 1: List of Health Facilities level, ownership and location in Dar es Salaam region-Tanzania

Annex Table 1: List of Health Facilities included in the study by level ownership and the number of Respondents.

Consent form: English version

Swahili version

Data collection tool: English

Swahili version

LIST OF TABLES

Table 1: Distribution of study respondents by cadre, level and facility ownership 27

Table 2: Socio demographic characteristics of the study respondents..... 29

Table 3: Distribution of health providers who had been approached by a woman with unwanted pregnancy by cadre.....30

Table 4: Frequency distribution of women during the last 1year who presented themselves to the study respondents with unwanted pregnancy 31

Table 5: Services offered by the study respondents' to the women presenting with unwanted pregnancy by facility ownership 33

Table 6: Factors that determines the study respondents' decisions to offer termination of unwanted pregnancy.....35

Table 7: Factors that determines the study respondents' decisions NOT to offer termination of unwanted pregnancy service.....36

Table 8: Study respondents' attitude towards the management of unwanted pregnancy.....38

Table 9: Study respondents' reasons for indicating that unwanted pregnancy to be a problem of public health importance.....39

Table 10: Suggestions given by the Study respondents for reducing the magnitude of unwanted pregnancy.....40

Table 11: Reasons given by the study respondents who supported legalization of abortion in Tanzania as a means of reducing the magnitude of unsafabortion.....41

Table 12: Reasons given by the study respondents who do not favor legalization of abortion in Tanzania.....42

LIST OF ABBREVIATIONS

AGI	-	Allan Guttmacher Institute
EMOC	-	Emergency Obstetrics Care
MDG	-	Millennium Development Goals
WHO	-	World Health Organization
SPSS	-	Statistical Package for Social Sciences
TDHS	-	Tanzania Demographic and Health Survey
TOP	-	Termination Of Pregnancy
UN	-	United Nations
UNPD	-	United Nations Population Division

DEFINITION OF OPERATIONAL CONCEPTS

Attitude- is a mental state of readiness, organized through experience exerting an influence upon an individual's response to an object and situations, which it is related.

Practice is defined as the way health providers are managing unwanted pregnancies in their clinical practice when approached by a woman with unwanted pregnancy.

Unwanted pregnancy is defined as undesired, unplanned, not needed not welcomed pregnancy.

Termination of pregnancy (TOP) which is commonly known as abortion is defined as an intentional procedure of ending the pregnancy resulting into expulsion of the embryo or fetus before the reasonable chance of survival outside the uterus.

Induced abortion is the procedure that results in termination of unwanted pregnancy and expulsion of an embryo or fetus.

Safe abortion is a procedure of terminating unwanted pregnancy performed by a trained health provider with proper equipment, correct technique and sanitary standards (WHO, 2003).

Unsafe abortion is a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both (WHO, 1992)

1.0 INTRODUCTION

1.1: BACKGROUND

Unwanted pregnancy is one of the public health problems that are underreported in many communities because of its sensitive nature. It is affected by a number of factors including the existing social services, personal beliefs, religious and cultural values as well as the existing abortion law whether liberal or restrictive. Women presenting with unwanted pregnancies come from all races, ethnic, social economic status and religious backgrounds (Mashaballa, 1989). Having a baby is one of the most important events in a woman's life however it is unfortunate that even in developed countries some women do not plan the timing of their pregnancy. In USA for example 50% of pregnancies are unplanned (Eggleston et al, 2001).

The majority of unwanted pregnancies follow unplanned pregnancy but occasionally planned pregnancies may turn up to be unwanted pregnancies for different reasons hence presenting as unwanted pregnancy (Baginsk, 2007). According to the World Health Organization, even if all contraceptive users were to use their methods perfectly all the time, there will still be nearly six million accidental pregnancies annually (WHO,

2003) which may end up as unwanted pregnancies. In places where effective contraceptives are widely available and used, the numbers of unwanted pregnancies have decreased sharply and hence the abortion rates (Bongaarts and Westoff, 2000). Abortions have however cannot declined to zero for several reasons including the following:

First, millions of women and men do not have access to adequate contraceptive information and support to use them effectively. Second, there is no contraceptive method, which is 100% effective. Third, high rates of violence against women at home and in war lead to unwanted pregnancies.

Fourth, changing circumstances such as divorce or other crisis can result into planned pregnancies becoming unwanted. Africa has exceptionally high rates of unwanted pregnancies because many women lack access to family planning services and because the contraceptive use is low (Leonard and Ladipo, 1994).

In Tanzania modern contraceptive acceptance is low. In 1995 only 11% were using a contraceptive during the survey period, and 21% had ever used modern contraceptives, (Weinstein et al, 1995). Currently the contraceptive prevalence rate in Tanzania is 26%, with 20% of married women using modern contraceptives (TDHS, 2004/5). The low modern contraceptive use gives a reflection of the magnitude of unplanned pregnancy, which has an increased possibility of becoming unwanted pregnancy when compared to planned pregnancy. Magotti (1993) showed that at Muhimbili National Hospital in Dar es Salaam 32.6% of women who presented with incomplete abortion had unplanned pregnancies.

Each year 210 million women become pregnant worldwide, 63% of these pregnancies end up in live births, 15% of the pregnancy results in miscarriage or spontaneous abortion while the rest 22% end up being terminated as unwanted pregnancies (AGI, 1999). Globally the vast majority of women are likely to have at least one induced abortion by the time they are 45 years (AGI, 1999).

Woman with unwanted pregnancy could be young, unmarried, forced to begin sexual relations very early to prove that they are capable of producing children, others arising from alleged rape or incest (Kabir and Sandral, 1989).

Some of the women who presents with unwanted pregnancy are married with or without children, rich or poor coming from both rural and urban communities. The individual decision of what to do with an unwanted pregnancy may be guided by what is the best at that particular time however at other points of life the decision could be different. In most cases by the time a woman presents with unwanted pregnancy to the health provider she had already made her decision for TOP and very rare that she can change her mind following counseling to continue with the pregnancy.

Women with unwanted pregnancy are in life crisis situation and may take the risk of undergoing induced abortion, especially when safe abortion services are not readily available or accessible (Kabir and Sandral, 1989).

Safe abortion can be provided by trained health providers with proper equipments, correct technique and sanitary standards as an integral part of reproductive services. In places where access to abortion services is legally restricted, or where the law provides for abortion on many grounds but services are not fully available or are of poor quality a number of women suffer since they opt to undertake unsafe abortion despite all the complications associated with the procedure ranging from immediate complications to life long and even death.

The fact that many women risk death, injury and social or criminal consequences to terminate pregnancy clearly demonstrate how desperately they wish to delay or avoid having a child at a particular period for different reasons and circumstances. Globally maternal deaths due to complications of unsafe abortion have been reported to increase from 13% to 20%, apart from the ten thousands who suffer long-term health consequences including infertility (WHO, 2003, World Health Report 2005) respectively. In Ilala District Dar es Salaam Urassa et al (1996) showed that unsafe abortions caused 15% of the maternal deaths. The figure was found to be higher in Hai District, Kilimanjaro region whereby a third of maternal deaths were related to induced abortion and unsafe abortion (Unpublished Public Facility EmOC Survey, 2005).

Addressing the problem of unwanted pregnancy will be dealing with one of the main causes direct cause of the maternal mortality and morbidity in Tanzania and other developing countries.

The availability of limited management options of unwanted pregnancies in Tanzania despite the restrictive abortion law and lack of safe abortion services in addition to religious and cultural values gives a challenge to the health provider when faced by a woman presenting with unwanted pregnancy.

1.2 STATEMENT OF THE PROBLEM

Unwanted pregnancy is a public health problem since the majority of women with unwanted pregnancies opt for termination of pregnancy (Baginsk, 2007), even when safe abortion services are not available or accessible, women are opting for unsafe abortion with all its complications (WHO, 2003). Unsafe abortion has a number of medical complications and even leading to maternal death (Urassa et al, 1996), apart from the social or criminal consequences in cases of illegal abortion.

Public reaction on the unwanted pregnancy challenge is mixed with strong opposition to termination of pregnancy, most of the health providers (%) refusing to offer termination of pregnancy services due to their own conscientious objections even where abortion is legally allowed and taken as part of reproductive health services (Harrison et al, 2000).

In Tanzanian context where there is a restrictive abortion law the health provider is in dilemma when faced by a woman with unwanted pregnancy whether to either take the risk of offering safe abortion or deny the service and let nature take it's own course.

Women with unwanted pregnancy are in life crisis whereby they had already made up decision to take the risk of termination of pregnancy when they approach the health providers regardless of the reasons which lead to their option, hence they present the challenge for action (Baginsk, 2007). Occasionally following counseling the woman may change her mind to accept the pregnancy and bear the child, however the majority present with their final option to seek for termination of pregnancy at whatever cost.

There is clear evidence that in Tanzania like in many other countries where there is a restrictive abortion law that termination of pregnancies are done secretly by both health providers and non professionals later some women presenting to the health facilities with complications of unsafe abortion (Mpangile et al, 1993; Temba et al, 1994; Rash et al, 2000).

Unwanted pregnancies presenting with unsafe abortion complications contribute significantly to the maternal morbidity and mortality (Urassa et al, 1996). In order for Tanzania to achieve the reduction of maternal mortality by three quarters by the year 2015 (MDG 5) it is crucial to look at what are the current practices and what can be done to reduce the problem of unwanted pregnancies. There are a number of studies which had been looking at the characteristics of women presenting with the complications of suspected induced abortion (Mpangile et al, 1993; Urassa et al, 1996; Rasch et al, 2000), however there is a gap as to what really happens when a health provider is approached by a woman with unwanted pregnancy.

In the situations where the health system is not prepared for termination of pregnancy services as it is having a restrictive abortion law like Tanzania apart from the health providers religious, morals and cultural values there is a need of having other management options to improve the situation.

1.3 RATIONALE

Unwanted pregnancy is a challenge in the context of the restrictive abortion law in Tanzania, as well as low availability, accessibility and acceptability of modern contraceptives, apart from lack of social support system like social security fund for children and adoption services.

The decision on what to do with unwanted pregnancy present as a challenge at different levels not only to the individual or family level, community level but also to the health providers who are to implement its management.

World Health Organization estimates that 75% of abortions occurs in the developing countries where they practice is illegal but widely available (Deschner and Cohen, 2003).

In Tanzania women get unwanted pregnancies and because both safe and unsafe abortions are performed in secrecy it is difficult to get the statistics on how vigorously the existing restrictive abortion law is enforced.

There are several studies that have looked at the women who presented with complication of abortion in Tanzania (Mpangile et al, 1993; Urassa et al, 1996; Magotti et al, 1993; Rasch et al, 2000), however so far there is lack of knowledge as to what is done when a woman with unwanted pregnancy

presents to the health provider seeking for termination of pregnancy in Tanzania.

This study is expected to show the current health providers' attitude and practice on the management of unwanted pregnancy, their opinions on the future reduction of unwanted pregnancy and on the policy and regulations of abortion, hence contribute in the reduction of maternal morbidity and mortality.

1.4 Research questions

How do health providers manage unwanted pregnancy especially when the pregnant woman has made a decision to seek for termination of pregnancy?

What are the factors that influence health providers in their management option for unwanted pregnancy?

Is provision of safe abortion an option?

1.4: Study objectives

1.4.1: Broad objective

To determine health providers' attitudes, practices and factors influencing their management of women with unwanted pregnancies

1.4.2: Specific Objectives

1. To determine the proportion of health providers who have been approached by women with unwanted pregnancy in the last year by cadre.

2. To establish the factors that influence health provider's choice of management options for unwanted pregnancy.

3. To determine the attitude of health providers' towards various management options for unwanted pregnancy.

4. To establish health providers suggestions for reduction of unwanted pregnancy.

5. To establish health provider's opinion on the effect of legalization of abortion on the magnitude of unsafe abortions in Tanzania.

2.0 LITERATURE REVIEW

Women have multiple reproductive health needs throughout their reproductive life and also basic right to control what happens in their bodies including planning for children bearing (UN, 1996). Though the majority of unwanted pregnancies follow unplanned pregnancy but occasionally planned pregnancies turn up to be unwanted pregnancy for different reasons hence presenting as unwanted pregnancy (Baginsk, 2007).

Unwanted pregnancy is debilitating and depressing regardless of how it came about whether it was failed contraceptive, non-use or improper use of contraceptives, rape or incest or other changing circumstances or life crisis. The fact that there is no contraceptive that is 100% effective even when all contraceptives users were to use their methods perfectly all the time, there would still continue to be unwanted pregnancies (WHO, 2003). Therefore worldwide women are still susceptible to unwanted pregnancy though the extent of the problem differs with the accessibility, availability and consistency use of contraceptive methods. Africa has exceptionally high rates of unwanted pregnancies due to the fact that many women lack access to family planning services and because the contraceptive use is low (Leonard and Ladipo, 1994). Shortcoming of contraceptives and family planning delivery systems are the major reasons for unwanted pregnancy and unsafe abortion in the third world countries (Kabir and Sandral, 1989).

The decision on what to do with unwanted pregnancy presents a painful dilemma to a woman (Kabir and Sandral 1989). The woman may not be mentally, physically, socially and psychologically fit to bear the child.

The decision making of a woman with unwanted pregnancy may be guarded by what is the best at that particular time and point of life having considered her own personal realities and occasionally by the opinion of significant others. When a woman is faced with unwanted pregnancy though the problem is private but it has a number of public opinions and implications as to what should be done. In cases whereby termination of pregnancy had been the final decision, the woman with unwanted pregnancy faces several challenges regarding the existing abortion law, safe abortion services availability and accessibility, the cost attached to it apart from the religious and cultural values.

By the time the woman with unwanted pregnancy seeks for medical attention she has already made her final decision aiming at seeking for termination of the pregnancy (Baginsk, 2007). Occasionally following counseling a woman with unwanted pregnancy may accept to continue with the pregnancy and child bearing. Each woman presenting with unwanted pregnancy is unique and the time and effort needed for counseling to enable her to handle the crisis (Baginsk, 2007). During counseling process information is provided for the available services such as social support services, adoption options and the access for termination of pregnancy services. In most of the developed world countries there are more options for unwanted pregnancies available with some supportive groups for specific choice of action including the pro-life organizations offering adoption and other social supports (Baginsk, 2007), apart from other social support services such as social security fund for children support.

Globally in almost all the countries (98%) including Tanzania the law permits abortion to save the life of the mother. In more than three fifths of the countries, abortion is also allowed to preserve the physical and mental health of the woman, and in about 40% excluding Tanzania, abortion is permitted in cases of rape or incest or fetal impairment. One third of the countries allow abortion on economic or social grounds and at least one quarter offer abortion services on request (UNPD, 1999).

The actual magnitude of unwanted pregnancy is not appreciated especially in places where there is restrictive abortion law. The available figures are basically extrapolations indirectly from those who are presenting with complications of abortion or in cases whereby there was only interference of the pregnancy presenting with incomplete abortion to the health facilities. The figures do exclude those who had no early complications and those who present as neglected or abandoned babies (Temba et al, 1994; Thom, 2002).

The World Health Organization (2005) estimates that 75% of all abortions occur in developing countries where the practice though illegal is widely available. There are restrictive abortion laws in almost all the Sub Saharan African countries except South Africa as per United Nations Global Review (2001).

In some countries women are legally entitled to have abortion in cases of unwanted pregnancies, however safe abortion services are not available for a number of reasons hence the woman still face the challenge of opting for unsafe abortion to get rid of the unwanted pregnancy.

The reasons for lack of safe abortion services includes health system factors such as lack of trained providers or their concentration in urban areas, negative provider attitudes, lack of knowledge of the law or application of the law by the providers, complex regulatory requirements or lack of resources (WHO, 2003). Though abortion had been legalized in many parts of the world it still remains as a highly controversial issue especially among the health providers who are supposed to implement the legislation.

Health providers are having mixed opinions on unwanted pregnancies management when the woman has made her decision for termination of unwanted pregnancy from their own moral, cultural and religious values, apart from medical ethics and the existing abortion law. Medical personnel are faced with an ethical dilemma when a woman approach them with unwanted pregnancy, their moral values of providing care to the woman, preserving life and avoid unsafe abortion. (Reproductive Health Alliances, 2002). The majority of health providers agree on the importance of having a more liberal abortion law to allow safe abortion and hence reduction of the unsafe abortion complications (Perrow, 1999). More than two thirds of obstetricians, psychiatrist and nurses support termination of pregnancy for very young such as under 14 years, over 40 years those with failed contraceptives or those with high parity but only slightly less than a third supported abortion on request

(Dommisse, 1980; Nash et al, 1992). Perrow, 1999 showed that, 82% of the general practitioners were supportive of the change of the abortion law to allow the women the right of choice for an abortion in South Africa.

Despite the legalization of abortion in South Africa and necessary training of the health providers, only 28% of the designated health providers to offer abortion services were actually rendering the service two years later (Frances, 2002) making the abortion service not easily accessible. Some years after legalization of abortion in South Africa many health providers are still blocking women access to abortion services because of conscientious objections even to an existence of threatening those who are providing the services and at the end the poor women are deprived of the right for termination of pregnancy (Thom, 2002).

Early induced abortion is a safe and simple procedure when done under conducive settings. In countries where women have access to safe abortion services their likelihood of dying as a result of abortion done with modern methods is about one in 100000 procedures (AGI, 1999). In developing countries the risk of death following complications of unsafe abortion is several hundred times higher than that of an abortion performed professionally under safe conditions (WHO, 1998).

Unsafe abortion is a significant health problem in Sub Sahara Africa as measured by high proportion of incomplete abortion patients among all gynecological hospital admissions (Benson et at, 1996). Complications of unsafe abortion attributes to 13% of pregnancy related deaths, apart from those who suffer from post abortion infection some ending up with chronic pelvic pain and even secondary infertility (WHO, 1998).

Several researchers have done studies of the patients admitted with different forms of abortions in different countries including Tanzania and Kenya (Mpangile et al, 1993; Rasch at el, 2000; Lemma et al, 1996) respectively to demonstrate their characteristics and scenarios.

Most of the unsafe abortions in Africa are reported to be performed outside the clinical setting, usually because legal abortion is not available or accessible, often there are not enough health practitioners trained in performing induced abortion or because their services are expensive (WHO, 1994).

Mpangile et al, (1993), showed that 47% of the patients who presented with incomplete abortion in a public health facilities were actually induced abortions, 22% of abortion providers being 'doctors' 65% other health clinics workers and 13% quacks. Rasch et al, (2000) showed that 60% of the alleged spontaneous abortions in Dar es Salaam were actually induced abortions, 34% of the cases the induction was done by a 'doctors', in 44% by other health providers and 22% by unskilled personnel.

Though a number of unwanted pregnancies are terminated secretly however the majority such as about 80%of those who presented to the health facilities with unsafe abortion complications were attended by health providers (Mpangile et al, 1993; Rasch et al, 2000) hence the need to study the health providers attitude and practice on the management of unwanted pregnancy in Tanzanian context to avoid possible later presentation with complication.

3.0 METHODOLOGY

3.1: Study area

The study was conducted in Dar es Salaam region the largest city in Tanzania, which is situated on the east coast of Tanzania. It is bordered by the Indian Ocean to the east and on all other sides by the coast region. Dar es Salaam is at sea level; the climate is typically tropical with hot weather throughout the year (temperature ranges between 26 to 35°C). It has two rainy seasons; short rains from November to December and long rains in March to May. According to the 2002 population census, it has a total population of 2,497,940 of which 1,236,864 (45.9%) are females. Dar es Salaam has three municipalities namely Ilala, Temeke, and Kinondoni.

Dar es Salaam receives health services from public, private for profit and voluntary agency facilities. In the city there are 20 hospitals, 4 of them are government owned, 16 are privately owned or by voluntary agencies and 1 hospital is owned by the Tanzania Peoples Defense Force (TPDF). There are 20 health centers; 6 are government owned, 13 are privately owned and one is owned by TPDF (see the attached list of health facilities). In addition Dar es Salaam has 314 dispensaries, of which 66 are government owned.

Dar es Salaam region was chosen because of having health providers of different cadres from nurses to the consultant Obstetrician and gynecologist in

addition to its complexity in terms of different religious, cultural, social, economic and ethnic mix.

3.2: Study design

The study was a comparative cross sectional study, this method was found to be appropriate here due to the time and financial constraints.

3.3: Study population

Health providers at both public and private health centers and hospitals dealing with reproductive health services including management of incomplete abortion. The health providers who were included in the study were Nurses, Clinical Officers, Assistant Medical Officers, Medical Officers and Obstetricians /Gynecologists.

3.4: Sample size calculations

1) Number of health workers

Using the attitude and practice of the health providers on unwanted pregnancy as the key variable, the sample size was calculated using the following formula.

$$n = \frac{Z^2 P(100-p)}{\varepsilon^2}$$

Where:

n -minimal sample size

Z-standard normal deviate value (set at as to correspond to 95% confidence Interval).

ε- Margin of error is set at 6% in this study.

P-The estimated proportion of health providers with positive attitude on termination of unwanted pregnancy (The proportion of the health providers with positive attitude 28% nurses (Frances, 2002) and 82% General Practitioner (Perrow, 1999), hence took an average proportion of 55%.

$$n = \frac{1.96 \times 1.96 \times 55(100-55)}{6 \times 6}$$

$$= 264.11$$

Therefore the calculated sample size was 265, taking into account response rate of 10%, the minimum required sample was 275 health providers.

2) Number of health facilities.

For studies based on health facilities, Kielman (1995), recommended a sample which includes 25 to 30% if all health facilities. Given that there are a total 41 health facilities in Dar es Salaam which provide reproductive health services that are also accredited deal with pregnancy complications, 30% of the health facilities (12) were selected. The health facilities included four facilities from each of the three municipalities together with Muhimbili National Hospital located in Ilala Municipal which is Tanzania's largest tertiary hospital in order to get views from the Obstetricians and Gynecologists.

All the three Municipal hospitals were included as they were the only public hospitals in each Municipality and two health centers whereby only one was included in the study. The list of the existing private health facilities by Municipality and the level was used to select the facilities to be included in the study.

3.5: Sampling procedures

1) Selection of health facilities

A list of all private and public health centers and hospitals in Dar es Salaam was obtained from the Chief Medical Officer in the Ministry of Health and Social Welfare (See Annex 1). An equal number of public and private health facilities were selected in addition to the tertiary hospital that is Muhimbili National Hospital. Two public health facilities were selected from each municipality, one of which was the municipal hospital and one health center. The public health centers were randomly selected by tossing a coin for the two health centers in a particular municipality. The study also included health providers from six private health facilities that included one health center and one private hospital from each of the three municipalities. The private health facilities were listed by level and two facilities from each municipality were chosen by using simple

ballot method by writing the name of each facility on a piece of paper put together in box and ask the research assistant to pick one paper for the facility to be included in the study.

2) Selection of health providers

In each selected facility a list of the eligible health providers that is all the registered nurses and the all the clinicians, was obtained from the health facility administration. Using the list of the eligible health providers provided by the health facility administration, a random sampling method was to be used to select the first study participant followed by systematic method of sampling to select those who are to participate in the study after every second person in the list (as per proportional calculated from the sample population to the target population that was 55%). However during the actual fieldwork it was not possible to do that due to staff shortages hence there were less staff than what was projected from the ideal health providers requirement per health facility level.

Therefore all the eligible health providers were requested to participate in the study whereby the health providers who gave their consent were involved in the study.

3.6: Study variables

The dependent variables of the study were health provider's attitude, practice towards the management unwanted pregnancy, factors associated with unwanted pregnancies and the restrictive abortion law. The independent variables included the health providers' cadre and the demographic characteristics of the health provider, level and ownership of the heath facility.

3.7: Data collection tool

Data was collected using a self-administered questionnaire that consisted of both closed and open-ended questions. The questionnaire included a section for measuring the health providers' attitude on unwanted pregnancy and its management using the Likert's scale. The questionnaire was formulated in English and then translated to Swahili. Both versions were available for use in the field depending on the respondent comfortability with either language. There were four research assistants who received training for one day prior to going to the field. The research assistants were recruited from the three municipal hospitals and one from Sinza health center these included two nurses and two medical doctors. The research assistants were chosen from the previous working experience with them in a different project. The training included the following:

1. Brief explanation of the study and its objectives.
2. How to introduce the study subject and the distribution of the questionnaires.
3. Follow up of the field questionnaires

3.8: Pre testing of the questionnaire

Pilot testing of the questionnaire was carried out at Buguruni health center by the principle investigator and the research assistants during the training session, which was not be included in the study aiming at checking how the target population is going to understand the tool.

Review of the questionnaire was done following the pre-testing and necessary modifications were made.

3.9: Data collection

Data collection was done from the 18th June 2007 to 20th July 2007. The questionnaire was self administered due to the sensitive nature of the topic, names of the respondents and the health facility were not indicated on the questionnaire to assure anonymity.

Arrangements were made with the health facilities administration to introduce the study and distribute questionnaires to the reproductive health care providers. The collection of filled questionnaire was arranged with individual participant within the next 24 to 48 hours by either the principal investigator or the research assistant. The duration for data collection was two days for the health centers and four for the hospitals.

There were 320 questionnaires that were distributed however only 300 were collected, 33 of which were not filled and thus excluded in the analysis. The health providers who returned unfilled questionnaires reported to be too busy to spare time to participate in the study.

3.10: Data management and quality assurance

Data management and quality assurance started in the field. The principal investigator fully participated during the introduction of the study and requested the health providers to respond to all the questions since was no possibility of tracing the incompletely filled questionnaire to the respondents.

The principal investigator together with the research assistants met at the end of each day of data collection to solve any logistics problems.

3.11: Data Processing and Analysis

The open-ended questions were coded by one of the research assistants together with the principal investigator before entering the data into the computer programme for analysis. The attitude questions were analyzed using the scoring system the highest score being positive in a descending order towards negative attitude (Oppenheim AN 1992). Analysis of the data and all necessary calculations and statistical testing for significance of association was performed using Epi INFO 6 version 6.04 for DOS programme and the Statistical Package for Social Sciences. Chi-square test was used to test the association of various variables

3.12: Ethical Clearance

Ethical clearance for this study was obtained from the Research and Publications Committee of the Muhimbili University of Health and Allied Sciences. The aim of the study was clearly explained to each respondent and an informed written consent was obtained before they were provided with the questionnaire. Respondents were assured of the confidentiality of the information obtained.

Only identification numbers and not the actual names of the respondent appeared on the questionnaires as one of the strategies towards ensuring anonymity.

Permission was requested from the health facility administration in addition to that from the municipal authorities to conduct the study. The names of the specific health facilities were not indicated on the questionnaire in order to ensure anonymity.

4.0: RESULTS

A total of 267 health providers from health facilities in the three municipalities of Dar es Salaam and the Muhimbili National Hospital (tertiary hospital) were included in the study. Among these 74 (27.7%) were from Ilala, 56 (21.0%) from Kinondoni and 61 (22.8%) were from Temeke municipals respectively, while 76 (28.5%) were from Muhimbili National Hospital (see annex table2). About three quarters of the respondents 203 (76%) were from public health facilities with just over half of them (57.3%) working in hospitals as shown in table 1.

Overall, Nurses formed the highest proportion of the study respondents 172 (64.4%) followed by Clinical Officers, Medical Officers and Obstetricians/gynecologists who were almost of an equal proportion (i.e. 11.2%, 10.5% and 10.1% respectively) as shown in table 1. None of the Assistant Medical Officers were from private health facilities.

Table 1: Distribution of study respondents by cadre, level and facility ownership

	Facility Ownership					
Cadre	**Public=203**		**Private n=64**		**Total n=267**	
	No	**%**	**No**	**%**	**No**	**%**
Nurses	131	64.5	41	64.1	172	64.4
Clinical Officers	21	10.3	9	14.0	30	11.3
Assistant Medical Officers	10	4.9	0	0.0	10	3.7
Medical Officers	20	9.9	8	12.5	28	10.5
Obstetricians/gynecologists	21	10.4	6	9.4	27	10.1
Level						
Health center	20	9.9	18	28.1	38	14.2
Hospital	107	52.7	46	71.9	153	57.3
Tertiary hospital	76	37.4	0	0.0	76	28.5

Socio-demographic characteristics of the study respondents.

Table 2 shows that the highest proportion of the study respondents were females (76.4%). The highest proportion of the health providers (42.7%) were in the age group 30 to 39 years. The ages of the respondents ranged between 23 to 59 years, with the mean age being 37 ± 8.5years.

Most of the respondents were married followed by those who were single i.e. 68.5% and 24.7% respectively. Protestants formed the highest proportion of respondents (45.3%)

followed by Roman Catholics (34.8%). Moslems were 18% of the respondents. (See table 2).

Table 2: Socio demographic characteristics of the study respondents (n = 267)

Characteristic	Facility Ownership					
	Public n = 203		Private n = 64		Total n = 267	
	No	%	No	%	No	%
Sex						
Male	50	24.6	13	20.3	63	23.6
Female	153	75.4	51	79.7	204	76.4
Age (yrs)						
<29	30	14.8	21	32.8	51	19.1
30 to 39	93	45.8	21	32.8	114	42.7
40 to 49	58	28.6	13	20.3	71	26.6
50 to 59	22	10.8	9	14.1	31	11.6
Marital status						
Married	151	74.4	32	50.0	183	68.5
Single	41	20.2	25	39.1	66	24.7
Ever married*	11	5.4	7	10.9	18	6.8
Religion						
Roman Catholic	74	36.5	19	29.7	93	34.8
Protestants	87	42.9	34	53.1	121	45.3
Moslems	37	18.2	11	17.2	48	18.0
Others**	5	2.4	0	0.0	5	1.9

*Divorced 2, Separated 7 and Widow 9.

**Jehova witness 1, Pentecost 1, Seventh day 3

Specific objective 1: To determine the proportion of health providers who have been approached by women with unwanted pregnancy in the last 1year by cadre.

There were 197 (74%) study respondents who reported to have been approached by women with unwanted pregnancy during the last one year as shown in table 3. Among the clinicians 86 (90.5%) reported to have been approached by women with unwanted pregnancy compared to nurses 111 (64.5%) who reported to have been approached by women with unwanted pregnancy. (See table 3).

Table 3: The distribution of health providers who had been approached by a woman with unwanted pregnancy during the last 1 year by cadre.

	Approached	
Cadre	**No**	**%**
Nurses	111/172	64.5
Clinical Officers	27/30	90.0
Assistant Medical Officers	10/10	100.0
Medical Officers	24/28	85.7
Obstetricians/Gynecologists	25/27	92.6
Total	**197**	**73.8**

The 197 respondents who reported to have been approached by women with unwanted pregnancy in the past one year were asked to indicate the total number of women who approached them. Most of the respondents (65.5%) reported to have been approached by 1-5 women while 9 reported to have been approached by 26 women or more.

Overall the 197 respondents reported to have been approached by 1373 women, making an average of 7 women per health provider (range 1 to 40).

Table 4: Frequency distribution of women who presented themselves to the respondents with unwanted pregnancy.

Number of women	Frequency	%
1-5	129	65.5
6-10	35	17.8
11-15	9	4.6
16-20	12	6.1
21-25	3	1.5
>26	9	4.5
Total	**197**	**100.0%**

NB: Mean 7±7.5, Range 1-40

Services offered by the health providers to the women who presented with unwanted pregnancy.

Women who presented with unwanted pregnancies were offered different services. The majority of the respondents 172/197 (87.3%) reported to have offered counseling to the women to continue with the pregnancy regardless of health facility ownership (i.e 87.6% public Vs 86.5% private).

Overall 17% (34/197) of the respondents reported to have referred the women with unwanted pregnancy to another health provider for the termination of pregnancy with a slightly higher proportion of respondents from the public compared to private facilities reporting this however this finding is not statistically significant (i.e. 17.9% Vs 15.4 %, P=0.67).

Overall 8% (15/197) of the respondents reported to have offered termination of pregnancy services within the last one year with 13/15 (86.7%) being from public facilities (see table 5). There were 3 out of 13 (23.1%) public respondents reported to have offered TOP at their place of work (public facilities) with the rest (76.9%) reporting to have offered this service in a private facility. Of the 2 respondents from private health facilities who reported to have offered TOP in the last one year, one offered the service at his/her work place while the other one offered the service at another private facility.

Table 5: Services offered by the study respondents to the women who presented with unwanted pregnancy by facility ownership. n =197

Type of service provided	Facility Ownership						P-value
	Public n=145		Private n=52		Total n=197		
	No	%	No	%	No	%	
1.Counseling to continue with the pregnancy.	127	87.6	45	86.5	172	87.3	0.85
2.Reffered to another health provider for service.	26	17.9	8	15.4	34	17.3	0.67
3.Offered Termination of pregnancy at the facility.	3	2.1	1	1.9	4	2.0	0.61
4.Offered termination of pregnancy at a private facility.	10	6.9	1	1.9	11	5.6	0.32

Specific objective 2: To establish the factors that influence health providers' choice of management option for unwanted pregnancy.

Among the 197 respondents who were approached by women with unwanted pregnancy a total of 110 (55.8%) responded to an open ended question on what are the factors that determine their decision to offer termination of pregnancy service.

The majority of the respondents 99 (90%) reported the reason given by the women for seeking termination of the pregnancy to be an important factor influencing their decision on the management of unwanted pregnancy. Some respondents (6%) reported they would offer termination of pregnancy whenever they suspected that there was a possibility that the woman would seek unsafe abortion services elsewhere if they refused to provide the TOP.

More respondents from private facilities compared to those from public facilities reported that they would provide TOP whenever there was a possibility for the woman to seek unsafe abortion services if they refused to provide TOP (i.e 15.2% Vs 2.6%) P-value=0.041. Similarly more respondents from private compared to those from public facilities reported economic gain as a reason for offering TOP (i.e15.2% Vs 1.3% P-value = 0.013) see table 6.

Table 6: Factors that determine the study respondents' decision to offer TOP service. n=110.

Factors mentioned	Ownership						P-value
	Public n=77		Private n=33		Total n=110		
	No	%	No	%	No	%	
1.Reasons given for seeking termination of pregnancy	66	85.7	33	100.0	99	90.0	**0.052**
2.Failed counseling against termination of pregnancy	3	3.9	1	3.0	4	3.6	**0.740**
3.Pressure from significant others/relatives	3	3.9	5	15.2	8	7.3	**0.092**
4.Economic gain	1	1.3	5	15.2	6	5.5	**0.013**
5.To avoid the possibility of women seeking unsafe abortion	2	2.6	5	15.2	7	6.4	**0.041**

Factors that determine the health providers' decisions not to offer termination of unwanted pregnancy.

Among the 197 study respondents who were approached by women with unwanted pregnancy 156 (79.0%) responded to the question on the factors that determine their decisions for not offering TOP services. Most of the respondents 105 (67.3%) reported morals and religious values as the main

factor for not offering TOP. The restrictive abortion law was reported by 90 (57.7%) of the respondents as a reason for not offering TOP, with more respondents from public facilities reported this compared to those at the private facilities (i.e 60.9% Vs 48.8%) respectively.

About half of the respondents 51.9% reported anticipated complications of termination of pregnancy as the hindering reason for offering TOP, this was reported by more public health facilities respondents compared to those from the private facilities (55.7% Vs 41.5%) respectively though the difference was not statistically significant (P-value = 0.45) as shown on table 7.

Table 7: Factors that determines the health providers' decisions NOT to offer TOP service. (n = 156)

Factors Mentioned	Ownership						P-value
	Public n=115		Private n=41		Total n=156		
	No	%	No	%	No	%	
1.Morals and religious values	78	67.8	27	65.9	105	67.3	**0.82**
2.Restricted abortion law	70	60.9	20	48.8	90	57.7	**0.57**
3.Anticipated complications of termination of pregnancy	64	55.7	17	41.5	81	51.9	**0.45**
4.Reason for seeking termination of pregnancy not convincing	25	21.7	13	31.7	38	24.4	**0.20**
5.Advanced Pregnancy	4	3.5	5	12.2	9	5.8	**0.096**
6.Financial constraints	3	2.6	2	4.9	5	3.2	**0.85**

Objective 3: To determine the attitude Health providers' towards various the management options for unwanted pregnancy.

All the 267 health providers who participated in the study responded to all questions on their perception of unwanted pregnancy management. Overall 195/267 (73.0%) of the respondents were of the opinion that the management of unwanted pregnancy was a challenge in their practice, with 43.8% of them agreeing strongly to the statement.

There were 234 (88.0%) respondents who were of the opinion that unwanted pregnancy was a health problem of public importance, with 61.8% agreeing strongly that unwanted pregnancy was an important public health problem. A high proportion of health providers 67.4% reported that their religious values affected their decision on the management of unwanted pregnancy. Less than half of the respondents 46.1% (123/267) agreed that the Tanzania restrictive abortion law affected their decision-making on the management of unwanted pregnancy, while 18.0% (48/267) respondents indicated that they did not know whether their decision were affected by the law.

Table 8: Study respondents' attitude towards the management of unwanted pregnancy. (n = 267)

Statement	Attitude score. n = 267									
Unwanted Pregnancy:	**1**		**2**		**3**		**4**		**5**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**	**No**	**%**
1. is a challenge in its management.	26	9.7	19	7.1	27	10.1	78	29.2	117	43.8
2. is a public heath problem in Tanzania.	12	4.5	10	3.7	11	4.7	69	25.9	165	61.8
3. decision making on its management is affected by the Tanzania abortion law.	48	18.0	29	10.9	67	25.1	64	24.0	59	22.1
4.availability of more management option will affect the health providers' decision-making on its management.	32	12.0	31	11.6	65	24.3	84	31.5	55	20.6
5. decision making on its management is affected by the health providers' religious values.	21	7.9	29	10.9	37	13.9	81	30.3	99	37.1

Scores: 1 = Do not know, 2 = strongly Disagree, 3 = Disagree, 4 = Agree, 5 = strongly Agree.

Objective 4: To establish health providers' suggestions on how to reduce the problem of unwanted pregnancy.

All the study respondents filled the question on whether in their opinion unwanted pregnancy is a public health problem. The majority of the respondents, 252/267 (94.4%) were of the opinion that unwanted pregnancy is a problem of public health importance in the community. The respondents were mostly concerned with the complications arising from unsafe abortion (47.6%), the negative effect of unwanted pregnancy on the academic careers of women (42.1%) and the increasing numbers of street children (39.3%).

Table 9: Reasons given by study respondents indicating unwanted pregnancy to be public health importance. (n = 252)

Reasons mentioned	No	%
1. Complications arising from unsafe abortions	120	47.6
2.Negative effect on the academic career of the woman	106	42.1
3.Increased number of street children	99	39.3
4.Results in marital disharmony	42	16.7
5.Increased number of single parents	28	11.1
6.The increasing magnitude of unwanted pregnancy	27	10.7

NB: Multiple responses provided.

Suggestions given by health providers on the strategies for reducing unwanted pregnancy.

Respondents were asked to give their suggestions on possible ways to reduce the magnitude of unwanted pregnancy in the community. Provision of reproductive health education to community members was the most frequently given suggestion (70.0%). Other suggestions given included improving availability and accessibility of family planning services (56.6%) and instilling cultural and religious values in the community (25.5%) as shown in table 10.

Table 10: Suggestions given by respondents for reducing the magnitude of unwanted pregnancy (n = 267)

Suggestion	No	%
1.Provision of Reproductive health education to the community.	187	70.0
2.Family planning services availability and accessibility.	151	56.6
3.Cultural and religious values should be put in place.	68	25.5
4.Reduction of poverty level.	30	11.2
5.Have specialized designated health facilities for the management of unwanted pregnancy.	14	5.2

NB: Multiple responses provided.

Objective 5: To establish health providers' opinions on the effect of legalization of abortion on the magnitude of unsafe abortion in Tanzania.

About 62% (165) of the study respondents were aware of the existence of the Tanzanian abortion law, although 27.3% (45) of them were not fully aware of its details. A total of 90/165 (54.5%) respondents were of the opinion that a less restrictive abortion law would reduce the magnitude of unsafe abortion (Data not shown) and 82 of them gave reasons to support their opinion (see table 11). The most frequently reason was that it would allow the availability of safe abortion services (72/ 82 or 87.8%) and reduce malpractice 35.4% (29/82). There were 10/82 (12.2%) respondents who were of the opinion that a less restrictive abortion law will improve access to menstrual regulation in early pregnancy see table 11.

Table 11: Reasons given by study respondents who supported legalization of abortion as a means of reducing the magnitude of unsafe abortion in Tanzania.

n = 82*

Reasons to support legalization of abortion	**No**	**%**
1. Safe abortion services will be available	72	87.8
2.It will reduce malpractice.	29	35.4
3.Improved access to modern contraceptives	10	12.2
4.It will reduce street children	4	4.9

NB: * 8 Respondents gave no supporting reason(s).
Multiple responses provided.

Reasons given by the by the study respondents for not supporting legalization of abortion.

Among the 75 respondents who were of the opinion that having a less restrictive abortion law in Tanzania will not reduce the magnitude of unsafe abortion 53 (71%) gave reasons to support their opinion see table 12. More than half 30/53 (56.6%) were of the opinion that a more liberal abortion law will increase the occurrence of unsafe abortion, while 17/53 (32.1%) reported that abortion is not culturally acceptable. There were 14/53 (26.4%) respondents who were of the opinion that the demand for unsafe abortion would still persist in spite of having a more liberal abortion law as shown in table 12.

Table 12: The reasons given by the study respondents who do not favor legalization of abortion. n = 53*

Reasons for not supporting legalization of abortion	No	%
1.It will increase the magnitude of unsafe abortion	30	56.6
2.Abortion is not culturally acceptable	17	32.1
3.The demand for unsafe abortion will still persist.	14	26.4
4.Abortion is used as a source of income	6	11.3
5.The current law is not as effective as expected.	3	5.7
6.Community may not get the right information	2	3.8

NB: *22 Respondents gave no supporting reason(s).
Multiple responses provided.

5.0:DISCUSSION

Study findings indicate that almost three quarters 74% of study respondents had been approached by a woman seeking TOP service in the last 1 year period. Overall a total of 1373 women approached the 197 study respondents making an average of about 7 women per study respondent. This is an indication of the magnitude of the unwanted pregnancy problem in the community. It has been shown elsewhere that the rate of abortion is related to the level of unwanted pregnancy, which is also related to the prevalence of contraceptives use, (Deschner and Cohen, 1999). The World Health Organization, (2005) estimates that 75% of abortion worldwide occurs in developing countries including Tanzania where the practice is mostly illegal. The majority of the study respondents (83.3%) reported to have offered counseling to continue with the pregnancy when a woman last approached them with unwanted pregnancy. While counseling might have assisted the woman with unwanted pregnancy to be aware of possible alternatives, that she can choose from, the final decision on action to be taken is left to the women herself. It is possible that some of the women could have accepted to carry their pregnancies to term, however since there are no special follow up clinics it is not possible know the decision that they made. Previous research as shown that women who have an unwanted pregnancy are in a crisis situation and by the time they see a health provider they have already made a decision for TOP and are ready to even undergo unsafe abortion if they fail to secure the safe TOP (Baginsk, 2007).

Only three of the 13 public facilities respondents who reported to have offered TOP reported to have offered the service at their place of work (public health facility) while the rest reported to have offered the service at a private health facility. This raises the issue of affordability as these women under normal circumstances could have gone straight to the private health facilities for the TOP service. Only two health providers from private health facilities reported to have offered TOP with one of them reporting to have offered the service at his /her working facility, while the other one had to take the patient elsewhere. This shows how difficult it is for the health provider to offer TOP even when he/she has made a decision to provide the service. The fact that TOP is not offered as part and parcel of comprehensive reproductive health services in Tanzania put health providers in a dilemma when they are faced with cases of failed counseling since TOP is not legal and because of their moral and religious values. The dilemma comes from the fact that the health provider is trained to offer safe abortion however prohibited by the law and her/his religious values even when there is a high possibility of the woman opting for unsafe abortion. Lack of safe abortion services (WHO, 2003) is reflected by the number of women who are seen with unsafe abortion complications at health facilities some of which reported to have been done by health providers outside the clinical settings (Mpangile et el 1993, Rasch at al, 2000).

The majority of the respondents (90%) in this study reported the reason given by the women for seeking TOP as the main factor influencing their decision to offer the service.

In actual practice the decision on what to do with unwanted pregnancy is difficult and based on circumstances, Kabir and Sandral, (1989) described this as a painful dilemma.

The fact that safe abortion services are not readily available in most health facilities puts health providers in a dilemma whenever approached by a woman with an unwanted pregnancy that is seeking for TOP. The health providers' dilemma exists even when they have reached a decision to offer TOP service such as how and where to do the procedure since TOP services are not available at the health facility and generally not acceptable at the community level. The 10 public health facility respondents who reported to have offered TOP at private health facilities (see table 5) indirectly indicates the fact that the services are not readily available, a fact which was also described by Mpangile et al 1993, and Rasch et al 2000). A small proportion of study respondents (6%) who were approached by women with unwanted pregnancy reported to have offered TOP whenever they suspected that there was a possibility that if they refused the woman would have gone to seek abortion services elsewhere, where there was no safety assurance. This clearly demonstrates that health providers are faced with a dilemma when they consider their moral values of providing care to the women, preserving life and avoiding unsafe abortion as described in the Reproductive rights alliance, 2002. A higher proportion of respondents from the private facilities reported offering TOP when there was a possibility that a woman would seek unsafe abortion elsewhere compared to those in the public facilities (i.e 15.2% Vs.2.6%) see table 6.

This could be an indication that the working regulations at the private health facilities are less restrictive as to the type of services provided to the clients whenever safety needs to be assured. A higher proportion of respondents from the private facilities compared to those in the public facilities reported economic gain as a reason for offering TOP (i.e15.2% Vs1.3%) see table 6. This is explained by the fact that the private health facilities are business oriented and are more likely to offer TOP services secretly for economic gain. However this could just be the tip of the iceberg as globally the majority of TOP are reported to be done outside the clinical settings and these later present to health facilities with unsafe abortion complications (WHO, 1994). In Tanzania TOP services have mostly been reported to be offered by health providers even when done outside the clinical settings (Mpangile et al, 1993, Rasch et al, 2000).

Moral and religious values were reported as the main factor for not offering TOP by 67.3% of the study population see table 7. The moral and religious values were reported as a hindering reason for offering TOP more often than the restrictive abortion law (i.e 67.3% Vs 57.7%) respectively (see table 7). This fact had been seen in actual practice even in places where abortion had been legalized see Ward, 1996 whereby some doctors and nurses had been even attempting to stigmatize or persecute their colleagues who are prepared to do the abortion on ones morals position. Dyson and While, 1999, also showed similar findings from the nurses who were involved in TOP who expressed to have experienced conflict between TOP and their moral values apart from been

stressed. The religious and moral values had lead to objection of the concerned health providers even threatening of those who are ready to offer TOP services (Thom, 2002). Nurses in Odi Community Hospital which is one of the South African designated hospital to offer safe abortion reported similar experience for TOP services whereby the nurses needed counseling periodically to gain the strength to continue with the services (Personal communication October 2006). Globally the religious and moral values have created a debate on the unwanted pregnancy management even when abortion is legal, apart from other medical limitations, the health providers having conscientious objection to be involved in abortion (Ward, 1996). Religious and moral values have been shown to be among the factors that hinder accessibility of safe abortion services even in countries where abortion has been legalized like in South Africa, Zambia and Mozambique (Frances AA, 2002).

This indicates that among other consideration there will be a need to get the experience from those who had been having a liberal abortion law on how this was solved in case there will be a review of the restrictive Tanzania abortion law.

The current restrictive abortion law was reported by 57.7% of the respondents as a reason for not offering TOP, the health providers from the public facilities reported this more frequently as compared to those at the private facilities (60.9% Vs 48.8%) respectively.

A possible explanation is public facility health providers are more bound to adhere to the national rules and regulations since there are more open monitoring systems in public facilities. About half of the respondents 51.9% reported anticipated complications of termination of pregnancy as the hindering reason for offering TOP, this was reported by more public health facilities respondents as compared to those from the private facilities (55.7% Vs 41.5%) respectively as shown on table 7. This could be partly explained by the fact that public health facility respondents are more likely to manage women with unsafe abortion complications and even experiencing more maternal deaths resulting from unsafe abortions (Urassa et al 1996) compared to those from the private facilities because of financial implications in private facilities. In clinical practice early induced abortion is a safe procedure however the lack of access to safe abortion services leads to utilization of unsafe abortion services outside the clinical settings hence resulting to more complication (AGI, 1999, WHO, 1998).

The most frequently reason reported to support their opinion was the fact that unsafe abortion complications lead to more financial constraints to the government in terms of health services provision expenditure, as it is more costly to treat post-abortion complications than to offer safe abortion services. Magotti, 1993, also described the high cost of treating unsafe abortion complications.

Almost three quarters (73.0%)of the respondents were of the opinion that the management of unwanted pregnancy was a challenge in their practice; the health provider has a number of questions to answer including how and where to offer the TOP apart from having the clinical skills for termination of pregnancy when safe abortion services are neither available nor acceptable in our community.

Less than half of the respondents (46.1%) were of the opinion that the Tanzania restrictive abortion law affected their decision making on the management of unwanted pregnancy, this could be partly explained by the fact that some of the respondents were not even aware of the existence of the abortion in Tanzania. The other reason could be that some of the respondents felt that the law was not enforced since abortions are practiced in dark corners as Temba et al, 1994, previously described it. The situation in Tanzania is similar to other countries where abortion is illegal hence the practice is done outside the clinical settings secretly (WHO, 2001). Other researchers found higher proportions of health providers supporting a less restrictive abortion laws ranging between 80% and 89% (Dommisse, 1980, Nash et al, 1992; and Perrow, 1999).

Provision of reproductive health education to the community was the most frequently mentioned suggestion that was reported by (70.0%) respondents for the reduction of unwanted pregnancy see table 10. This could have an effect, as exposure to reproductive health education had been to have influenced the

targeted population behavior as described by Deschner and Cohen, (2003), and hence enhance the utilization of protective measures to avoid unplanned pregnancies.

Improving the availability and accessibility of family planning services was suggested by over half of the respondents (56.6%), as one of the possibilities of reducing the magnitude of unwanted pregnancy. The above results indirectly reflect low contraception utilization by the community which was also previously found by Weinsten et al (1995) this was also observed in the TDHS, 2005 whereby the Tanzania contraceptives prevalence rate was found to be 26% with a total family planning demand of 50%. The shortcoming of contraceptives and family planning delivery systems were also previously found to be the major reason for unwanted pregnancy and unsafe abortion in the third world countries (Kabir and Sandral, 1989). The stock out syndrome of variety of contraceptives plays some role apart from the general public believe on the side effects of some modern contraceptives coupled by some religious teachings being against use of some effective contraceptive methods.

Instilling cultural and religious values in the community was suggested by (25.5%) of the respondents, this could work out according to the public opinion, whereby the young girls are supposed to abstain from sexual relations till marriage as shown by Liljestrom et al, (1998), however in the current age of globalization world being like a small village the western culture is spreading

fast hence may need to be more liberal on reproductive health services, such as accessibility of contraceptive services to youths.

This may have some impact on the reduction of unwanted pregnancy but some unwanted pregnancy may still occur, as there is no perfect contraceptive method even with ideal usage World Health Organization, 2003, hence still needs consideration of how to manage unwanted pregnancy across the country, from the policy makers and health professionals view in addition to the cultures, morals and religious values.

In overall 62% (165) of the study respondents were aware of the existence of the Tanzanian abortion law, of these 54.5%of the respondents supported having a less restrictive abortion law since this could save those who presents to the health facilities where safe abortion services could be available, however the health systems needs to be prepared to match with liberalization of abortion laws with both administrative and structural support otherwise women may still be denied the services and opt for unsafe abortion. Unwanted pregnancy being a challenge to the health providers even where abortion is legal due to the moral and religious issues apart from the other medical limitations the problem needs to have a multi-sectors approach. Among the problems facing the provision of safe abortion even where it had been a women legal right is the health providers having conscientious objection to be involved in abortion hence limited accessibility of the service (Thom A, 2002). Some of the respondents (12.2%)who were of the opinion that a less restrictive abortion law will reduce the magnitude of unsafe abortion through enhancing family planning services

as part of comprehensive service, in the post abortion care (see table 11) hence reduce recurrence of unwanted pregnancy. The post abortion counseling session will give the women a chance to get information on contraception methods including emergency contraceptives before leaving the health facility as per WHO, (2003) recommendations. The respondents felt that currently even the few who get the safe abortion services, abortion being an illegal procedure there is no further review due to the sensitivity of unwanted pregnancy management hence a lost opportunity for sensitization on family planning methods utilization. It had been shown elsewhere that the magnitude of abortion is affected more by the rate of unwanted pregnancy or indirectly family planning services availability and accessibility more then the existing abortion law as described by Deschner and Cohen, (2003).

Among the 75 respondents who were of the opinion that having a less restrictive abortion law in Tanzania will not reduce the magnitude of unsafe abortion 70.7% of them gave reasons to support their opinion as shown in table 12. Among these 30 (56.6%) respondents were of the opinion that it will rather worsen the situation, due to the fact that the demand for TOP would be beyond the available services. The fact that abortion is not culturally accepted was among other reasons that were reported by 17 (32.1%) of the respondents who did not support having a less restrictive abortion law for the reduction of unsafe abortion. Some respondents were of the opinion that having specialized facilities for the provision of safe abortion services may be a prohibiting factor

to women with unwanted pregnancy, as from the public point of view to avoid stigmatization thus continuing having unsafe abortions in dark corners.

Public reaction is mixed on the abortion issue with strong opposition; health providers refusing to provide the service even where there is a less restrictive abortion law. Therefore legalization of abortion cannot ensure safe abortion services accessibility and utilization (Harrisson et al, 2000), thus unwanted pregnancy remains a challenge with the limited available management options.

Study limitations

Due to the sensitive nature of the topic and the existing controversies on the management of unwanted pregnancy some health providers were afraid of reporting their actual practices and opinions on the management of unwanted pregnancy.

This fear was allayed by clear explanation of the purpose of the study and ensuring that the information shared will be dealt with in a confidential manner in addition to having a self-administered questionnaire will not bear the individual participant name.

There was some reluctance from some health providers to fill the questionnaire due to their tight working schedules, which resulted into several follow up visits to recollect filled questionnaires and return of some unfilled questionnaires.

There were some incomplete filled questionnaires especially for the open ended questions hence consideration was taken during the analysis of the data whereby the proportions were referred to only those who responded to

particular questions since the questionnaire were anonymous hence it was not possible to revisit the respondents.

There was no enough time to test the reliability of the Likert's attitude scale used for in this study.

6.0: CONCLISION AND RECOMMENDATIONS

6.1: CONCLUSION

Unwanted pregnancy is a problem of public health importance in our society as demonstrated by the high proportion of study respondents who indicated that they had been approached by women with unwanted pregnancy during the last one year, an intervention need to be done to reduce its magnitude in Dar es Salaam region, Tanzania.

An ethical dilemma occurs to health providers when they grapple with the moral values of providing care to women, preserving life and avoiding unsafe abortion in addition to the restrictive abortion law of Tanzania, when faced by women with unwanted pregnancy who have made her decision to terminate the pregnancy.

Just over a half of the health providers were of the opinion that a less restrictive abortion law will reduce the magnitude of unsafe abortion.

The following options for reducing the magnitude of unwanted pregnancy were suggested by the respondents; reproductive health education to the community, improvement of the family planning services availability and accessibility to reach the unmet needs in the community hence reduce the unplanned pregnancies.

The other suggestions included multi-sector approach with the involvement of the society leaders and religious leaders in enhancing the cultural and religious values that encourage planned pregnancy and an overall improvement of the social economic status of the community is more likely to reduce the magnitude of unwanted pregnancy. Lastly but not least social services improvement including counseling services and supportive groups during the unwanted pregnancy crisis to avoid irrational actions, adoption option and other social support services in cases of unwanted pregnancies for different reasons.

6.2 RECOMMENDATIONS

There is a need to reduce the magnitude of unwanted pregnancy and hence unsafe abortion and its complications through reproductive health education to the community and provision of accessible family planning methods, which are less costing and probably more acceptable than safe abortion services by the public in general.

During planning for the ways to reduce the magnitude of unwanted pregnancy there is need of taking into consideration of the acquired immunodeficiency syndrome pandemic in our society since there are limited contraceptive methods that highly effective in preventing pregnancy and protection from the transmission of Human Immunodeficiency virus Infection.

Taking into consideration that abortion has remained highly controversial issue among the health providers and the public in general even where there is a liberal abortion law, there is a need to undertake a bigger study to include more health providers from other parts of the country and the community to get their views and opinions on how to reduce unwanted pregnancy and hence unsafe abortion for the reduction of maternal mortality and morbidity in Tanzania.

REFERENCES

Abdella A (1996). Dermographic characteristics social economic profile and contraceptive behaviour in patients with abortion at Jumma Hospital, Ethiiopia. East African Medical Journal 73:660-664.

Abou Zahr C and Wardlaw TM (2004). Maternal Morality in 2000, Estimates Developed by WHO, UNICEF and UNFPA Geneva. WHO 2003.

Ahman E and Shah I Unsafe Abortion Global and Regional Estimates of the incidence of Unsafe Abortion Geneva WHO 2004 Table 3.

Alan Guttmacher Institute (1999). Sharing, Responsibility, Women Society and Abortion Worldwide. New York AGI 1999. Chart1.1

Baginsk LJ, (2007), Pregnancy Planning. Medicine home>Women Health Page. C 1996-2007. Medicine Net.

Benagiano G and Pera A (2002). Decreasing the need for abortion: Challenges and constraints. International Journal of Gynecology and Obstetrics. 70 (1): 35-48.

Benson J, Nicholson LA, Gaffik L, Kinoti S (1996). Complications of unsafe abortion in Sub Saharan Africa; a review; Health Policy and planning 11 (2) 117-131.

Bongaarts J and Westoff CF (2000). The potential role of contraception in reducing abortion. Studies in Family panning 31:193-202.

Deschner A and Cohen SA (2003). Contraceptive use is key to reducing abortion worldwide. The Guttmacher Report on public Policy 2003, 6(4) 7-10 and Hensshaw SHK, Sigh S and Prospectives, 1999, (Supplement) S30-S38.

Dyson L and While A (1999). Termination of pregnancy a difficulty Decision-making process. British Journal of Community Nursing Vol 4 issue 9, 476-482.

Dommisse J (1980). The South African Gynecologists attitude to the present abortion law. South Africa Medical Journal 57 (25) 1044-5.

Eaggleston E, Tsiu A O and Kotel C (2001). Unwanted pregnancy and low birth weight in Ecuador. American Journal of Public Health. 91; 808-810.

Frances AA (2002) Work in progress: Expansion of access to abortion services in South Africa following legalization. International Family Planning Perspectives June 2002.

Harrison A, Montgomery E, Mark L and Wilkinson D (2000). Barriers of implementing South African's Termination of Pregnancy Act in rural Kwa-Zulu/Natal. Health Policy and Planning volume 15(4): 424-431.

Kabbir S and Sandral M (1989). Causes and consequences of Unwanted Pregnancies from the Asian Women Perspectives. International Journal of Obstetrics and Gynecology. Suppl. 3:9-14.

Kielman AA, Janursk K and Annet H (1995). "Assessing district health needs service and system" Protocols for rapid data collection and analysis" Macmillan and AMREF, London and Basingstoke.

Lemma V M, Rogo K and Kamau R K (1996). Induced Abortion in Kenya. Its determinants and associated factors. East Africa Medical Journal 73(3): 164-168.

Leonard AH and Ladipo AO (1994). Post abortion family planning factors in individual choice of contraceptive methods. Advances in Abortion care. 4(2): 116-121

Liljestrom R, Masanja P, Rwebangira MK and Urassa EJN (1998). Haraka Haraka..... Look before you leap Nordiska Afrikainstituter Stockholm pg 11-42.

Magotti RF (1993). Obstetrics and Gynaecologal Cases and commentaries. MMed Thesis University of Dar es Salaam RG529.M377.

Mashaballa NN (1989). Commentary on the causes and consequences of unwanted pregnancy from Africans perspectives. Journal of Obstetrics and Gynecology. Supplement. 3: 15-19

Mirsky J,Radlett M, Davies W and Bennett O (1994). Private Decision Public Debate. Women Reproduction and Population Panos reproductive Health Programm.

Mpangile GS, Leshabari MT and Kihwele DJ (1993). Factors associated with Induced Abortion in Public Hospitals in Dar es Salaam Tanzania. Reproductive Health Matters 2:21-31.

Nash ES, Brink JH, Potocnik FCI and Dirks BL (1992). South African Psychiatrist' Attitude to the present implementation of abortion and sterilization Act of 1975. South African Medical Journal 82: 434-6.

National Bureau of Statistics (NBS) [Tanzania] and ORC Macro. 2005. Tanzania Demographic and Healthy Survey 2004-05). Dar es Salaam, Tanzania: National Bureau of Statistics and ORC Macro.

Oppenheim AN (1992). Questionnaire Design and Attitude Measurements. revision.ed) Alder shot Gower Publication.

Perrow F (1999). Maria Stopes International Report, June 1999.

Programme Population and Housing Census (2002). www.tanzania.go.tz/census/dsm.htm (accessed March 2007)

Rasch V, Muhamed H, Urassa E and Bernstrom S (2000). Self Reports of Induced Abortion, an empathetic setting can improve quality of data. American Journal of public Health in Press.

Rasch V, Muhamed H, Urassa E and Bergstrom S (2000). The Problem of Illegally Induced abortion; Results from hospital-based study conducted at Ilala District level in Dar es Salaam. Tropical Medicine and International Health volume 5 (7): 495-502

Reproductive Right Alliance (2002). Unsafe termination of pregnancy. Chapter 2 Review article. 2002:4

Temba P and Nkya A (1994). Illegal Abortion in Tanzania in Dark corners. Women Reproduction and Population Panos Reproductive Health Programme.

Thom A (2002). Staff attitudes one of the main hurdles in making abortion accessible. www.health.e.org.za (accessed in May 2007).

United Nation Department of Economic and Social Affairs Population Division.
Summary of the Abortion Laws around the World. Abortion Policies: A global review c 2001.

United Nations. (1996) Report of the Fourth World Conference on Women, Beijing, 4-15 September 1995. New York, United Nations. (Sales No.96.IV.13)

United Nations Population Division (1999). World abortion policies 1999. New York, United Nations. Population Division (ST/ESA/SER.A/178).

Urassa E, Massawe S, Lindmark G and Nystrom L (1996). Maternal Mortality in Tanzania-medical causes are interrelated with Social Economic and Cultural factors. South African Medical Journal 86:436-444.

Ward H (1996). South African Changes Abortion Law, conscientious objection to participating in or performing abortions in the light of proposed legislation tabled before the parliament for 1996.