RISK FACTORS FOR ABORTION AMONG WOMEN IN KITWE - ZAMBIA

BY

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A DISSERTATION SUBMITTED TO THE UNIVERSITY OF ZAMBIA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH

(SCHOOL OF MEDICINE)
THE UNIVERSITY OF ZAMBIA
LUSAKA
1996
1.2 Statement of the Problem

There are two main groups of abortion; (i) Spontaneous abortion and (ii) induced abortions. Spontaneous abortion is the termination of pregnancy other than by deliberate action undertaken with the intention of terminating pregnancy before foetus attains viability (Donald, 1979). Spontaneous abortion is a known complication in up to 15-20% of clinically recognized pregnancies ((Mebride, 1991, Nelson et al 1992). In some developing countries, the corresponding figures seem to be lower. All the figures maybe an underestimate of the true incidence of spontaneous abortion as many women miscarry during the first month without being aware that they were pregnant and the condition may be considered as a heavy menstrual period. (Mebride and Wells, 1991)

The Kitwe Central Hospital admits women with abortion daily. Between January and June 1996 the obstetrics and gynaecology department had 6155 admissions. Of these admissions 707 were cases of abortions and 3336 were deliveries (KCH 1997). The main aim of this study was to identify important risk factors for abortion among women coming into Kitwe Central Hospital with various types of abortion.

The study isolated some socio-economic and clinical factors that may be concerned with the risk of abortion in women in Kitwe-Zambia. It
compared women coming in with abortions with those admitted for child birth. The knowledge from these findings should help health personnel caring for antenatal women in the early detection of problems and proper management in the future.
COPYRIGHT DECLARATION

I hereby declare that the work presented in this study for the Master of Public of Health is my own work, and that it has not previously been submitted either wholly or in part for any other degree and is not being currently submitted for any other degree at this or another University.

Signed: ..................................................  
STUDENT

Signed: ..................................................  
SUPERVISOR
DEDICATION

I dedicate this work to my children; Chungu, Salli, Kapenda and Njeko.

x x x x x x x x
APPROVAL

This dissertation of Mrs. Joyce Katebe Saili is approved as fulfilling the requirements for the award of the degree of Master of Public Health by the University of Zambia.

Signature: 

[Signature]

[Signature]

Date: 

5TH SEPTEMBER 1997 

26-7-98
ABSTRACT

RISK FACTORS FOR ABORTION AMONG WOMEN ATTENDING
KITWE CENTRAL HOSPITAL - ZAMBIA

A study of this nature has not been done before either in Kitwe or Zambia at large and hence the need to carry it out now. The main objective of this study was to identify risk factors for abortion among women in Kitwe. It was a case-control study conducted at Kitwe Central Hospital (KCH) in Zambia. The cases were 200 consecutive women admitted to Kitwe Central Hospital with abortion between December 1996 and February 1997. Controls were 200 consecutive women who had normal delivery within the same Hospital during the same period. Analysis indicated a significant association between abortions and marital status, type of marriage, and infection. Other factors showed no significant difference. Most of the women were not on any form of Family Planning. Attention needs to be given to pregnant women with personal or family history of spontaneous abortion and who have had an infection during the current pregnancy. Counselling and health education on risks and dangers of abortion are recommended. The provisions of the termination of pregnancy act should be promoted to prevent criminal abortion.
ACKNOWLEDGEMENTS

I wish to express my sincere thanks to my sponsors; the Directorate of Human Resource Development and training, and my employers University Teaching Hospital Board of Management through Ministry of Health who made it possible for me to study for Master of Public Health degree.

I also wish to convey my gratitude to all the people who have contributed advice, suggestions, encouragement and guidance; the members of the faculty of the Department of Community Medicine for the assistance especially Dr. N. Ng'andu my supervisor and Professor P. Sims the co-supervisor for their constant guidance in writing this study.

I am also grateful to the Executive Director, Nursing Services Manager for granting me permission to carry out the study, the head and area Manager of Obstetrics and gynaecology, ward managers Luena, Lukulu, Chambeshi and Lukusashi wards at Kitwe Central Hospital where the study was carried out and all the staff of these wards and the administrative block for their great assistance. I thank Dr. A. Mbewe for his assistance with the computer lessons.
I am deeply indebted to the respondents who participated in the study without whom this study would not have been possible.

My heartfelt appreciation goes to my husband Kingstone for his moral support.

To my children Chungu, Saili, Kapenda and Njeko go special thanks for having put up with my absence especially Njeko the baby who was deprived of the mother's presence and attention at a very early stage in his life.

My other thanks go to Mrs. Jennifer Bwalya, Mrs. Rosemary Mukumbuta and Ketiwe for the meticulous secretarial work.

To all of them I say God bless and keep up the good spirit.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>KCH</td>
<td>Kitwe Central Hospital</td>
</tr>
<tr>
<td>KHMB</td>
<td>Kitwe Central Hospital Management Board</td>
</tr>
<tr>
<td>UTH</td>
<td>University Teaching Hospital</td>
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<td>TOP</td>
<td>Termination of Pregnancy</td>
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</table>
CHAPTER 1

1. INTRODUCTION

1.1. Background Information

The Concise Oxford Dictionary defines abortion as the act of giving untimely birth to offspring, premature delivery; miscarriage; the procuring of premature delivery so as to destroy offspring. To the physician, the term 'abortion' and miscarriage are synonymous, but to the patient the terms have different implications: abortion is an operation done deliberately to end a pregnancy; miscarriage is an accidental, unwanted event in a woman's reproductive life. Either event can have long term psychological sequelae.

(Elder, 1988) According to available literature between 10 to 15% of all pregnancies terminate as spontaneous abortions and a further 10 to 60% are terminated by induction (either legal or criminal) abortion. (Lewelly and Jones, 1986) Kitwe is one of the cities of the Copperbelt province of Zambia and one third of Zambian population is found on the Copperbelt and Lusaka Provinces. These two Provinces have the highest population density of fifty persons per square kilometre (Gross et al, 1992)
Kitwe is the third largest city in Zambia. It is situated at the centre of the Copperbelt Province towns and hence commonly called the “hub of the Copperbelt Province”. Kitwe district has an area of 737 square kilometres at an average attitude of 1250 metres above sea level. The total population in 1994 was approximately 546,234 with an annual growth rate of about 1%. Two-thirds of the total population is catered for by Kitwe Central Hospital the only government hospital in the district and council clinics.

The Kitwe Central Hospital is one of two big hospitals serving the non-miners on the Copperbelt Province and has a bed capacity of about 500. The Obstetrics and Gynaecology department admits on average about 1025 patients per month. Out of these admissions 11% are abortion patients (KCH, 1997). There is no abortion service for unwanted pregnancy available at the institution.
1.2 Literature Review

From the literature reviewed a similar study to this one in Saudi Arabia revealed that the risk of spontaneous abortions increased with advanced age at menarche, consanguineous relationships had twice the risk of spontaneous abortion, as non-consanguineous. (Gibolaham et al, 1995)

Studies on very early pregnancy diagnosed by Urinary human Chorionic Gonadotrophin (HGG) measurement suggest that the rate of spontaneous abortion ranges from 32-78% (Mebride 1991, O’concor, et al, 1988)).

Nchito in her study on spontaneous abortions in University Teaching Hospital between October 1979 and March 1980 revealed that maternal age and parity play a role in the outcome of the pregnancy (Nchito, 1980). This retrospective study also indicated that 87% of the abortions were in persons under 30 years of age.

Another study done in University Teaching Hospital on criminal abortions in 1980 revealed that 60% of the admissions to the gynaecological wards are abortions (Desai et al, 1980).
Records from the U.T.H indicated that upto 30% of the maternal deaths are probably caused by Abortion (UTH 1993)

Despite sizable investments in family planning programmes, induced abortion continues to be widely practiced in many developing countries (Corytaux, 1988)

The Zambian termination of Pregnancy Act of 1972, based on the UK Abortion Act stipulates that registered medical practitioner may lawfully terminate pregnancy if two medical practitioners (of whom he need not himself be one) certify in good faith one or more of the following opinions:

1. That the continuance of the pregnancy would involve risk to the life of the pregnant woman greater than if the pregnancy were terminated.

2. That it would involve risk of injury to the physical or mental health of the pregnant woman greater than if the pregnancy were terminated or

3. That it would involve risk of injury to the physical or mental health of any existing children of the pregnant woman's family or
4. That there is a substantial risk that if the child was born it would suffer from such physical or mental abnormalities as to be seriously handicapped. (T.O.P. Act 1972)

The majority of women faced with an unwanted pregnancy seek help from friends, go to traditional healers or the ubiquitous "wise woman", or find and take the abortifacients of folklore or "muti" which may succeed or fail. (Sims, 1996)

The two most commonly used sources for measuring abortion rates (in the absence of surveillance data) are hospital admission records of complications of terminated pregnancies and household survey data (Barreto et al, 1992).

In a study at U.T.H, the majority of the respondents had no knowledge of the existence of the Termination of Pregnancy Act and the few who know about it had very little knowledge about this law (Mutenukile and Ndulo, 1994).

The treatment of large numbers of women with complications of unsafe abortion is a major problem in the health care systems of the African region; abortion complications are an important contributor to hospital - based material
mortality and morbidity (Armstrong and Royston, 1987).

Any treatment for the T.O.P must be carried out in a nationally recognised institution or one approved by Ministry of Health (T.O.P. Act, 1972).
1.3 Operational definitions

Unemployed - Client who is both unemployed and single as opposed to a married housewife.

Spontaneous Vaginal Delivery - Client who gave birth per vagina after 28 weeks of gestation.
CHAPTER 2

2. OBJECTIVES

2.1 General Objective

To determine the risk factors for abortion among women attending Kitwe Central Hospital, Zambia.

2.2 Specific Objectives

1. To determine the relationship between abortion and previous live births, number of previous abortions, outcome of last pregnancy and whether or not there was a family history of abortions.

2. To determine the association of abortion with age, education and age at menarche.

3. To determine whether or not trauma and infection are contributing factors to abortion.

4. To determine the prevalence of pregnancy and abortion in teenagers.

5. To utilize the findings in making recommendations to the appropriate authorities (Kitwe Hospital Board of Management).

2.3 Hypothesis

There are more abortions in women who have had previous history of abortion than in those without.
CHAPTER 3

METHODOLOGY

Kitwe has a total population of 546,234 persons. Out of this, 120,171 are women between 15-45 years of age. This was a case-control study involving 400 women hospitalised at the Kitwe Central Hospital on the Copperbelt Province of Zambia.

Permission for conducting the study was obtained from the Kitwe Hospital Board of Management (KHBM). The instrument for data collection was piloted at Kitwe Central Hospital (KCH) and necessary changes were made. The women in the pilot study were excluded from the main study.

Data collection was done between December 1996 and February 1997. The cases were 200 consecutive women admitted to Kitwe Central Hospital with abortion and the control group consisted of 200 consecutive women who had normal deliveries (with no history of bleeding during that pregnancy) in the same hospital and during the same period. Abortion was defined as 'Expulsion of the foetus before the 28th week of pregnancy' (Corytaux, 1988).

Using a standardized structured interview schedule, information was gathered by the investigator on age, education, age at menarche and whether or not the women had
a polygamous marriage. Other information included number of children, number of previous abortions, outcome of last pregnancy, (before current one) and whether or not there was a family history of abortion. It was also determined whether or not there was trauma and infection during the current pregnancy. Explanation was given to each respondent indicating the; nature, aims and objectives of the study and they had to give a written informed consent to be included in the study. Those unwilling to participate were dropped out and the next client was picked. Only one client declined to be included in the study, the rest were willing.

Data analysis was done with the help of the EPI Info Statistical Software. A P value of 0.05 or less was considered to be significant. In determining the relationship between variables mentioned earlier on and abortion, a bivariate analysis was done. This involved calculating the odds ratio and use of chi-square statistic to test bivariate associations.

Study Limitations

The study was limited to only one hospital in Kitwe because of lack of funds and time.
CHAPTER 4

PRESENTATION OF FINDINGS AND DISCUSSION

Demographic Characteristics

Tables 1-8 show the findings of the study pertaining to the association of each of the factors with abortion. Only four of these factors had a significant chi-square. These were marital status, type of marriage, previous miscarriages and infection.

Age Distribution

The prevalence of pregnancy was high in the age group 14 - 31 years; 82% in the cases and 84% in the controls there were few aged 40 and above.

Religion

Most of the women coming in with abortion were Protestants. 71% in the cases and 68% controls.

Marital Status

There were three times as many single women coming in with abortion than deliveries (32.5% abortions and 8.5% childbirth). The type of marriage common is monogamous. In Zambia, tradition does not allow one to marry a relative.

Age at Menarche

Most women in both groups reached menarche between the ages of 9 - 14 years. 63.96% cases and 62.18% controls.
Education

Majority of the respondents in both groups have received at least primary school education.

Occupation

48% of cases and 60.5% of controls were full time housewives, 26.5% of cases and 25% controls were self employed. 11% cases and 3% controls were unemployed.

Clinical Characteristics

Children

Most respondents had between 1 - 5 children 89.58% cases and 90.67% control. Of the two groups most of those without children were cases 28% as compared to the 3.5% controls.

Personal History of Spontaneous Abortion

Amongst those who had previous abortions the largest number was in the cases 26.5% as compared to 14.5% of the cases, had abortion in the last pregnancy in relation to the 10% of the controls.

Family History of Abortion

The largest number of respondents with family history of abortion was found to be in the cases, 40% as compared to the 37% in the controls.

Trauma and Infection during current pregnancy
There were a total of 49 women with infection out of the 400 respondents. Trauma was absent in most respondents from both groups but infection was present in 24.5% cases and 32.5% controls and had a significant P value reading of 0.05 in chi-square statistic. Of those, 17 cases (34.7%) and 37 controls (56.92%) had had treatment and the rest did not.

**Action at Home**

Almost all the women coming in with abortion denied having done anything to tamper with pregnancy except 11 cases and 4 controls.

Most of the 11 took traditional medicine and one was given ergometrine injection 9 times and loop inserted to procure an abortion. All the controls who took medicine indicated that the traditional medicine was to enhance labour.

**Diagnosis**

Most of the cases came in with incomplete abortion 82%, 5.5% had incomplete septic abortion while 7% came in with complete abortion.

**Antenatal Care**

99% of the controls had antenatal care while only 10% of the cases had.
Family Planning

11.5% of the controls and 9.5% of cases were using some Family Planning method when they became pregnant.

Other Findings

26.5% of the controls and 15.5% of the cases were aware of the existence of the law on abortion although most of them could not give any comments on it. Of those who were aware of the existence of the law 13 (41.94%) cases learnt about it from the media and 27 (50.94%) controls.

DISCUSSION OF FINDINGS

Abortion is still one of the main causes of death in pregnancy. It is not possible to state the percentage risk of spontaneous abortion, as the total number of such cases is not known: nor is the number of illegal abortions known.
CHARACTERISTICS WITH SIGNIFICANT CHI SQUARE
SOCIO-DEMOGRAPHIC CHARACTERISTICS

TABLE 1 MARITAL STATUS

<table>
<thead>
<tr>
<th></th>
<th>MARRIED</th>
<th>UNMARRIED</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Cases</td>
<td>155 (77.5%)</td>
<td>45 (22.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Controls</td>
<td>183 (91.5%)</td>
<td>17 (8.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>338 (84.5%)</td>
<td>62 (15.5%)</td>
<td>400 (100%)</td>
</tr>
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</table>

Odd Ratio = 0.32
95% Confidence Limits
$X^2 = 16.10$
Degrees of freedom = 4
P Value = 0.00

Clinical Characteristics

Tables 2 Previous Abortions

<table>
<thead>
<tr>
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<th>+</th>
<th>-</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td>Cases</td>
<td>69 (34.5%)</td>
<td>131 (65.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Controls</td>
<td>39 (19.5%)</td>
<td>161 (80.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>108 (27%)</td>
<td>292 (73%)</td>
<td>400 (100%)</td>
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Odds Ration = 2.17
95% Confidence limits
$X^2 = 12.43$
Df = 4, P Value = 0.01

Table 3 Infection

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<tr>
<td>Cases</td>
<td>49 (24.5%)</td>
<td>151 (75.5%)</td>
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</tr>
<tr>
<td>Controls</td>
<td>65 (32.5%)</td>
<td>135 (67.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>114 (28.4%)</td>
<td>286 (71.5%)</td>
<td>400 (100%)</td>
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Odd Ratio = 0.67
95% Confidence limits
$X^2 = 11.27$
df = 5
P Value = 0.05

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### Table 4  Treatment for Infection

<table>
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<th>TOTAL</th>
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<td>Cases</td>
<td>17 (34.7%)</td>
<td>32 (65.3%)</td>
<td>49 (100%)</td>
</tr>
<tr>
<td>Controls</td>
<td>37 (56.9%)</td>
<td>28 (43.1%)</td>
<td>65 (100%)</td>
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<tr>
<td>TOTAL</td>
<td>54 (47.4%)</td>
<td>60 (52.6%)</td>
<td>114 (100%)</td>
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Odds Ratio = 0.40  
95% Confidence limits  
$X^2 = 8.57$  
$df = 2$  
P Value = 0.01

### Table 5  Antenatal Care

<table>
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<th>TOTAL</th>
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<td>Cases</td>
<td>20 (10%)</td>
<td>180 (90%)</td>
<td>200 (100%)</td>
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<tr>
<td>Controls</td>
<td>198 (99%)</td>
<td>2 (1%)</td>
<td>200 (100%)</td>
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<td>TOTAL</td>
<td>218 (54.5%)</td>
<td>182 (45.5%)</td>
<td>400 (100%)</td>
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Odds Ratio = 0.00  
95% Confidence limits  
$X^2 = 318.63$  
$df = 1$  
P Value = 0.00

### Table 6  Knowledge of Abortion Act

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<td>Cases</td>
<td>31 (15.5%)</td>
<td>169 (84.5%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Controls</td>
<td>53 (26.5%)</td>
<td>147 (73.5%)</td>
<td>200 (100%)</td>
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<td>TOTAL</td>
<td>84 (21%)</td>
<td>316 (79%)</td>
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Odds Ratio = 0.51  
95% Confidence limits  
$X^2 = 7.28$  
$df = 1$  
P Value = 0.01
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<tr>
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<td>Other</td>
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<td>Protestant</td>
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<td>Other</td>
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**TABLE 7.** Socio-demographic characteristics with non-significant chi square
<table>
<thead>
<tr>
<th>2. Outcome of Post</th>
<th>0 - 10</th>
<th>1 - 5</th>
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<th>S. Characteristic</th>
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<tbody>
<tr>
<td>No. of Live Children</td>
<td>0</td>
<td>7</td>
<td>15</td>
<td>129</td>
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<td>(9)</td>
<td>(3)</td>
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TABLE 8. CLINICAL CHARACTERISTICS WITH NON SIGNIFICANT CHI SQUARE

- 20 -
CHAPTER 5

DISCUSSION OF FINDINGS

Abortion is still one of the main causes of death in pregnancy. It is not possible to state the percentage risk of spontaneous abortion, as the total number of such cases is not known: nor is the number of illegal abortions known (Armstrong and Royston, 1989).

Complications of unsafe abortion procedures are thought to account for as much as 50% of maternal deaths worldwide, and the risk of death following complications from unsafe abortion for women in developing countries has been estimated to be between 100 and 500 times higher than that of an abortion performed professionally under safe conditions (Clayton et al, 1983)

Interesting aspects have emerged from this study. The Association of increased maternal age and incidence of abortion has been cited in studies from different populations (Omran and standly, 1981, Clarke et al 1988).

It is said that the risk increases considerably when a woman is over 40 years. However, this relationship cannot be clearly demonstrated in this study possibly due to the fact that there were few women in the older age groups.
In line with other studies (Sims, 1996) a mothers' education was not associated with increased risk of abortion in the present study.

This study does not demonstrate an association between age at menarche and abortion as other earlier studies have done (Gibolaham et al, 1995). However, it is in line with findings of other studies which have reported an inverse relationship between age at menarche and risk of spontaneous abortion (Bocciolonelel et al, 1991).

The literature indicates that the subject of the relationship between age at menarche and risk of spontaneous abortion is unexplained and controversial (Mayaux, et al, 1983). These findings and explanations, however, may need further study to confirm them and exclude the possibility of bias due to small numbers.

It was difficult to isolate induced from spontaneous abortion except in the few mentioned cases. It is likely that patients fear the law after they have already tampered with the pregnancy, especially a criminal abortion. Thus the medical practitioner records according to the findings on examination with no other comments. This is also often the case in developed countries (Clayton et al, 1983).
The finding that infection during pregnancy is associated with abortion agrees with other studies (Paterson, et al, 1983) spontaneous abortion may be caused by direct infection of the fetus or by the disease in the mother affecting the uterus and intra-uterine environment. An association between abdominal trauma and spontaneous abortion has not been shown although it is a popular belief that a miscarriage can be precipitated by an abdominal trauma such as hit to or a fall on the abdomen. It likely too that when an abortion occurs, a woman's ability to recall and to associate the event with trauma is higher than when pregnancy continues uneventfully.

The actual incidence of induced abortion is difficult to determine as patients tend to hide information. This is in line with other studies (Mutenukile & Ndulo, 1994). The possibility that the results of this study may reflect a selection bias in the population studied needs to be carefully evaluated, as only hospitalised women were included. It should be kept in mind, however, that this Hospital adopts a policy that all patients with inevitable abortion have direct access to admission. It follows that these cases are, to a certain extent, representative of abortions in the community at large.
However, abortion, whether spontaneous or induced can have long term psychological sequelae. Most of the women were not using any form of contraceptive; 90.5% of the cases and 88.5% of the controls, when they became pregnant. They may have perceived themselves as not being sexually active at that particular time or possibly some may be using abortion as a method of family planning. Abortion maybe one of the off shoots of the prevailing poverty in the nation. It is a documented fact that poverty in Zambia is very high. In 1991, about 69% of all Zambians were living in households with expenditure per adult equivalent below a level sufficient to provide basic needs (Demesmaker and Jorgensen, 1994). It is important to mention some undocumented findings, ie. the poverty reflected by some respondents being unable to pay for the service, and not being able to afford maternity pads and/or nappies.

While any women in the 15-45 age group may seek care for abortion complications, young, unmarried women with few children are overrepresented (Benson et al, 1994). This is in line with findings of this study where 82% of cases had incomplete abortion and 7% had septic incomplete abortion. In studies done in Zambia, estimated mean cost of incomplete abortion patient's daily stay US$15.50 for Lusaka and US$46.70 for Ndola (Benson et al, 1994).
CONCLUSION

This study has demonstrated a significant association between infection, marital status, type of marriage and abortion. The findings that young unmarried and poor women with infection have important implications for clinical practice. It is clear that several factors, many of which are unpreventable, present risk to the continuation of pregnancies. Other issues such as counselling, giving of information, education and communication on the dangers and risks of criminal abortion, knowledge of abortion act by both health workers and the community at large and the prompt management of infection may be helpful.
RECOMMENDATIONS

1. A study of a similar nature could be conducted on a larger scale involving other Hospitals in the city.

2. Further community-based studies which cover different areas of the province or country will be valuable in planning national prevention programmes.

3. Educate women on the abortion act and importance of family planning and safe abortion with emphasis on high risk groups.

4. Counselling and education of abortion cases at ward level is important to prevent recurrences. High risk groups need to be identified.

5. The Kitwe Hospital Board of Management should consider seriously the offering of termination of pregnancy as stipulated by the law and should be able to deal with defaulting medical practitioners instead of denying the women the service entirely. This will help reduce the number of unsafe abortions in the compounds.
Annex I

REFERENCES


A study on Spontaneous Abortion in the UTH of Zambia during of October 1979 - March 1980 (unpublished)

Criminal Abortions as seen at UTH Lusaka, Zambia Medical Journal

"Induced Abortion in Sub-Saharan Africa: What we do and do not know" Studies in Family Planned 19,3:187-190.

13. Unpublished Statistics from records at the University Teaching Hospital


24. Gasagrande JT, Pike MC


Annex II

UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE
INFORMED CONSENT

RISK FACTORS FOR ABORTION AMONG WOMEN IN KITWE - ZAMBIA

INTRODUCTION
You are being requested to take part in a research study in which information is being sought about abortions. It will be an interview with the researcher finding out information pertaining to pregnancy and abortion.

The main objective of the study is to identify risk factors that may contribute to women aborting. It only involves giving information and there are no invasive procedures. The information which you will give is not for use against you but may help in better management of patients with similar problems in future.

Your participation is voluntary and if you do not see it fit to participate, you are free to refuse or withdraw at any point. Whatever information you will give, will be kept highly confidential and no names will be given.

This research is being conducted by a student doing a master's degree in public health in the department of Community Medicine, School of Medicine. Should you have any other questions please contact Ms Joyce Katebe Saili Box 50110 or phone 229045 (home-Kitwe).
CONSENT

I have read and understood the above information and agree to participate in this study.

..............................
Patient's Signature

..............................
Investigator's Signature

..............................
Date

..............................
Date
INTERVIEW SCHEDULE

RISK FACTORS FOR ABORTION AMONG

WOMEN IN KITWE-ZAMBIA

INSTRUCTIONS: Name of the Respondent should not be recorded on the questionnaire

Date........................

Place...........................................

Respondents number............................

1 = Case  2 = Control

SECTION 1 PERSONAL DATA

1. Age in years..............................

2. Date of birth..............................

3. Nationality...............................

4. Religion.................................

5. Mother tongue............................

1. Bemba
2. Lozi
3. Tonga
4. Chewa
5. Kaonde
6. Lunda
7. Other (specify) 

6. What is your marital status?

1. Never married
2. Married
3. Separated
4. Divorced
5. Widowed

7. If married, is your marriage monogamous or polygamous?

1. Monogamous
2. Polygamous
3. N/A

8. Age of first marriage

9. Age at menarche

10. Occupation
1. Self-employed
2. Governmental employee
3. Private sector employee
4. Unemployed
5. Fulltime housewife
6. Other specify

11. Number of years in School
SECTION 2

12. Number of children

13. Age of youngest child

14. LMP

15. Gestation in weeks at time of miscarriage/delivery

16. Previous miscarriages

17. Who was responsible for the pregnancy

18. Whom did you talk to first about your pregnancy?
   1. Mother
   2. Husband
   3. Boyfriend
   4. No one
   5. Other (Specify)
   6. Do not remember (DNR)
   7. NA

19. Why did you decide to talk to this person?

20. Why did you come to the hospital

21. What did you do at home when the problem started?

22. Diagnosis
   1. Incomplete abortion
   2. Inevitable abortion
   3. Complete abortion
   4. Missed abortion
   5. Spontaneous vaginal delivery
   6. Incomplete septic abortion

23. Date of miscarriages/deliveries
24. Outcome of last previous pregnancy
   1. Still birth
   2. Live birth
   3. Miscarriage
   4. Other specify......................
   5. N/A

25. Have you had any of the listed below during current pregnancy?
   1. Fall
   2. Blow to the abdomen
   3. Any injury
   4. Other specify......................
   5. None of the above.

26. Did you receive treatment
   1. Yes
   2. No
   3. N/A

27. Have you had any of the listed below during current pregnancy?
   1. Lower abdominal pain
   2. Pain on passing urine
   3. Fowl smelling/brownish vaginal discharge
   4. Backache
   5. Fever
   6. Vaginal itchness
   7. Other specify......................
   8. None of the above
28. Did you receive treatment?
   1. Yes
   2. No
   3. N/A

29. Has anyone in your family have had a miscarriage before?
   1. Yes
   2. No
   3. Do not know.

30. Have you had any antenatal care for current pregnancy?
   1. Yes
   2. No

31. If so, for how long?

32. If not, why?

33. Have you ever heard of Family Planning?
   1. Yes
   2. No

34. What is Family Planning?

35. Have you ever used any family planning method?
   1. Yes
   2. No
36. Were you on any form of family planning when you became pregnant?
   1. Yes
   2. No

37. If yes what method
   1. IUCD
   2. Pill
   3. Condom
   4. Natural Scientific Family Planning
   5. Traditional method
   6. Injection
   7. Other specify.............................................
   8. N/A

38. If not, why?.............................................

39. Do you intend to use any form of Family Planning method after this when you go home?
   1. Yes
   2. No

40. If yes, what method
   1. IUCD
   2. Pill
   3. Condom
   4. Natural Scientific family planning
   5. Traditional method
6. injection
7. Other specify........................................
8. N/A

41. If no, why?...........................................

42. Are you aware of the abortion law in Zambia?

1. Yes
2. No

43. What is your source of information?

1. Health worker
2. Friend
3. Church
4. Media
5. Community Fora (Workshop)
6. Other (specify).................................
7. N/A

44. What do you know about the abortion law?

..................................................................

..................................................................

45. Any comments about this law?

..................................................................

..................................................................
TERMINATION OF PREGNANCY

Section 5—The Termination of Pregnancy Regulations

Regulations by the Minister

1. These Regulations may be cited as the Termination of Pregnancy Regulations.

2. (1) Any opinion to which section three of the Act refers shall be certified in the appropriate form set out in the First Schedule.

(2) Any certificate of an opinion referred to in subsection (1) of section three of the Act shall be given before the commencement of the treatment for the termination of pregnancy to which it relates.

(3) Any certificate of an opinion referred to in subsection (4) of section three shall be given before the commencement of the treatment for the termination of pregnancy to which it relates or, if that is not reasonably practicable, not later than twenty-four hours after such termination.

(4) Any such certificate as is referred to in sub-regulations (2) and (3) shall be preserved by the practitioner who terminated the pregnancy to which it relates for a period of three years beginning with the date of such termination and may then be destroyed.

3. (1) Any registered medical practitioner who terminates a pregnancy anywhere in Zambia shall, within seven days of the termination, give to the Permanent Secretary, Ministry of Health, notice thereof and the other information relating to the termination in the form set out in the Second Schedule.

(2) Any such notice and information as is referred to in sub-regulation (1) shall be sent in a sealed envelope marked "Confidential" to the Permanent Secretary, Ministry of Health, P.O. Box 205, Lusaka.

4. A notice given or any information furnished to the Permanent Secretary, Ministry of Health, in pursuance of these Regulations shall not be disclosed except that disclosures may be made—

(a) for the purposes of carrying out his duties, to an officer of the Ministry of Health authorised by the Permanent Secretary, Ministry of Health; or

(b) for the purposes of carrying out his duties in relation to offences against the Act or the law relating to abortion, to the Director of Public Prosecutions or a member of his staff authorised by him; or
(c) for the purposes of investigating whether an offence has been committed against the Act or the law relating to abortion, to a police officer not below the rank of Assistant Superintendent or a person authorised by him; or

(d) for the purposes of criminal proceedings which have begun; or

(e) for the purposes of bona fide scientific research; or

(f) to the registered medical practitioner who terminated the pregnancy; or

(g) to a registered medical practitioner, with the consent in writing of the woman whose pregnancy was terminated.

FIRST SCHEDULE
(Regulation 2)

IN CONFIDENCE

CERTIFICATE A

(Not to be destroyed within three years of the date of operation)

THE TERMINATION OF PREGNANCY ACT

CERTIFICATE TO BE COMPLETED BEFORE A TERMINATION OF PREGNANCY IS PERFORMED UNDER SECTION 3 (1) OF THE ACT

I, ..........................................................  
(name and qualifications of practitioner in block capitals)

of ..........................................................  
(full address of practitioner)

and I, ..........................................................

(name and qualifications of practitioner in block capitals)

of ..........................................................

(full address of practitioner)

and I, ..........................................................

(name and qualifications of practitioner in block capitals)

of ..........................................................

(full address of practitioner)

hereby certify that we are of the opinion, formed in good faith, that in the case of ..........................................................

(name and qualifications of pregnant woman in block capitals)

of ..........................................................

(full address of pregnant woman in block capitals)

(usual place of residence of pregnant woman in block capitals)

1. The continuance of the pregnancy would involve risk to the life of the pregnant woman greater than if the pregnancy were terminated;

2. The continuance of the pregnancy would involve risk of injury to the physical or mental health of the pregnant woman greater than if the pregnancy were terminated;

3. The continuance of the pregnancy would involve risk of injury to the physical or mental health of the existing child(ren) of the family of the pregnant woman greater than if the pregnancy were terminated;

4. There is a substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped.

[Ring appropriate number(s)]
[S.1]

Termination of Pregnancy

This certificate of opinion is given before the commencement of the treatment for the termination of pregnancy to which it relates.

Signed ........................................

Date ...........................................

Signed ........................................

Date ...........................................

Signed ........................................

Date ...........................................

IN CONFIDENCE

(Not to be destroyed within three years of the date of operation)

THE TERMINATION OF PREGNANCY ACT

CERTIFICATE TO BE COMPLETED IN RELATION TO TERMINATION OF PREGNANCY IN EMERGENCY

UNDER SECTION 3 (4) OF THE ACT

1. ........................................

(name and qualifications of practitioner in block capitals)

of ........................................

(full address of practitioner)

hereby certify that I *am/was of the opinion formed in good faith that it *is/was necessary immediately to terminate the pregnancy of ........................................

(full name of pregnant woman in block capitals)

of ........................................

(usual place of residence of pregnant woman in block capitals)

in order—
1. to save the life of the pregnant woman; or
2. to prevent grave permanent injury to the physical or mental health of the pregnant woman.

(Ring appropriate number)

This certificate of opinion is given—
A. before the commencement of the treatment for the termination of the pregnancy to which it relates; or
B. not later than 24 hours after such termination.

Signed ........................................

Date ...........................................

*Delete as appropriate

SECOND SCHEDULE

(Regulation 3)

IN CONFIDENCE

THE TERMINATION OF PREGNANCY ACT

NOTIFICATION TO THE PERMANENT SECRETARY, MINISTRY OF HEALTH, OF A TERMINATION OF PREGNANCY PERFORMED UNDER SECTION 3 OF THE ACT

1. ........................................

(name and qualifications of practitioner in block capitals)

of ........................................

(full address of practitioner)

hereby give notice that I terminated the pregnancy of ........................................

(full name of pregnant woman in block capitals)

of ........................................

(usual place of residence of pregnant woman in block capitals)
Termination of Pregnancy

The grounds for terminating the pregnancy were:

1. The continuance of the pregnancy would have involved the risk to the life of the pregnant woman greater than if the pregnancy were terminated;
2. The continuance of the pregnancy would have involved risk of injury to the physical or mental health of the pregnant woman greater than if the pregnancy were terminated;
3. The continuance of the pregnancy would have involved risk of injury to the physical or mental health of the existing child(ren) of the family of the pregnant woman greater than if the pregnancy were terminated;
4. There was a substantial risk that if the child had been born it would have suffered from such physical or mental abnormalities as to be seriously handicapped.

(Ring appropriate number)

IN CASE OF EMERGENCY

The grounds for terminating the pregnancy were:

5. It was necessary to save the life of the pregnant woman; or
6. It was necessary to prevent grave permanent injury to the physical or mental health of the pregnant woman.

PLACE OF TERMINATION

The pregnancy was terminated at:

(address)

(on (date))

(signature of practitioner who terminated pregnancy)

IN ALL NON-EMERGENCY CASES, particulars of the practitioner(s) who joined in giving the certificate required for the purposes of section 3 should be shown below in the appropriate space(s):

(If the operating practitioner joined in giving certificate, insert at A and B particulars of the other certifying practitioner(s))

A. Name
   Address
   Qualifications

(If the operating practitioner did not join in giving certificate, insert at A, B and C particulars of the three certifying practitioners)

B. Name
   Address
   Qualifications

C. Name
   Address
   Qualifications

OTHER INFORMATION RELATING TO THE TERMINATION

(Items 1 to 8 to be completed to the best of the knowledge and belief of the operating practitioner)

1. Hospital file number
2. Name of woman
3. Date of birth of woman

For official use only
|-----------|------------|------------|-------------------------|-------------|

5. Occupation

Note: (a) If woman is married, specify husband's occupation
       (b) If woman is unmarried, specify her own occupation

6. Date of woman's last menstrual period

7. Previous pregnancies of woman:
   Number of—
   live births
   stillbirths
   terminations of pregnancies

If applicable, date of last termination of pregnancy under the above-mentioned Act

8. Number of woman's existing *children

9. Date of admission to place of termination of pregnancy

10. Date of discharge from place of termination of pregnancy

11. Grounds for termination of pregnancy
    (a) Medical condition of woman:
        Obstetric disease
        (specify)
    (b) Sustained medical condition of fetus
        (specify)
    (c) Non-medical grounds for termination of pregnancy
        (specify)

12. Type of termination of pregnancy:
    1. Dilatation and evacuation
    2. Hysterectomy-abdominal
    3. Hysterectomy-vaginal
    4. Hysteroscopy
    5. Vacuum aspiration
    6. Other (specify)
       (Ring appropriate number)

13. Was sterilisation performed?

14. Complications or death prior to notification:
    1. None
    2. Sepsis
    3. Haemorrhage
    4. Death
    5. Other (specify)
       (Ring appropriate number)

15. In the case of death, specify cause

Note: This form is to be completed by the operating practitioner and sent in a sealed envelope marked "Confidential" within seven days of the termination of the pregnancy to the Permanent Secretary, Ministry of Health, P.O. Box 205, Lusaka.

*Children mean a woman's natural children and any adopted, foster or step-children, up to the age of 16 years, living with her.