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Determinants of abortions in Katete District of Zambia: A hospital based survey

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ABSTRACT

This research was conducted at Saint Francis at Saint Francis Hospital over a period of four months (from September 22nd 2014 to January 23rd 2015). 168 women aged 12 to 46 years admitted and treated for incomplete abortion in Gynecology ward were interviewed. 63 participants (37.5%) had induced abortions and 105 participants (62.5%) had spontaneous abortions. All induced abortions were the results of unplanned pregnancies. The majority of all abortions (57.1%) resulted from unplanned pregnancies as compared to only 42.9% resulting from planned pregnancies (p<0.05). Both married and single participants had increased unmet needs for family planning. 57.3% of women had used contraceptives in the past and also had unintended pregnancies resulting in abortions. A significant number of induced abortions (22.2%) were incidentally caused by inappropriate use of contraceptives by providers. Sexual activities start as early as 9 years in Katete. Most youths with induced abortions were involved in unstable relationships, desired to continue with education, feared to ruin their future, and had limited knowledge and inconsistent use of contraceptive methods. The major determinants for induced abortions amongst participants were unplanned/unintended pregnancies. Other determinants such as illiteracy, lack of information, young age, poverty, and unsafe sex need to be addressed. There is need to promote consistent and correct use of contraceptives, to strengthen the health care delivery system and maintain the cold chain of contraceptive supply for sustainable availability and accessibility. Conjugated efforts by health care providers, community leaders, policy makers and politicians are needed to extirpate negative believes (on modern contraceptives) and cultural norms that promote unhealthy sexual and reproductive life.

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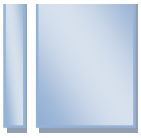
INTRODUCTION

Globally, an estimated 22 million unsafe abortion occur each year[1]. Nearly all unsafe abortions take place in developing countries.[1] About two thirds of all deaths due to abortions disproportionately affect Africa[1]. Mortalities associated with unsafe abortion account for 13 percent of all maternal deaths.[1] An estimated USD 680 million is spent annually to treat major complications of unsafe abortion[1]. The direct leading causes of maternal deaths and morbidity worldwide are: hemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labor.[2]

The direct causes of maternal deaths in Zambia are: hemorrhage, sepsis, obstructed labor, hypertensive disorders and abortion.[3] Many women in Zambia undergo unsafe, unsanitary and illegal abortions.[4] Hospital admissions for abortion related complications (spontaneous abortion included) increased in Zambia to more than 10,000 in 2008



(from 5,600 in 2003).[4] At least 50% of these reported complications were attributed to unsafe abortion. [4]

In a study conducted in Lusaka, approximately 15% of all maternal deaths were attributed to unsafe abortion (in 1993).[4]

At Saint Francis Hospital: incomplete abortions are the leading cause of admissions in gynecology ward. Saint Francis is a second level referral hospital in Katete rural district of Zambia. It is a 350 bed capacity hospital, providing services to the local population of Katete district (200,000 population), as well as accepting referrals from the whole Eastern province (1, 5 million population). The hospital also provides care to some people from the nearby neighboring countries such as Mozambique and Malawi.

Quality data on abortion are needed to inform policies and programs aiming to reduce maternal morbidity and mortality. The primary objective of this study was to generate information on abortions in Katete. Secondary objective: establish the determinants of abortions in Katete to enable the researcher formulate recommendations for betterment of population' health.

METHODS AND MATERIALS

This research is a qualitative, non-invasive, hospital based survey. Patients admitted and managed for incomplete abortion at Saint Francis hospital-Gynecology ward (Mukasa) were interviewed. The study was conducted over a period of four months (from September 22nd 2014 to January 23rd 2015).

Both open ended and closed ended semi structured questionnaire (English and Chewa languages) were administered to participants after obtaining a well-informed verbal consent. Data were collected on a well-designed interview form 1 by trained health professionals. All information was kept confidential.

Inclusion Criteria

All women of reproductive age, resident of Katete, diagnosed and treated for incomplete abortion (admitted in Mukasa ward) at Saint Francis Hospital.

Exclusion Criteria

All other causes of retained product of conception other than incomplete abortion, Non-resident of Katete.

Study Justification

The burden of unsafe, unsanitary abortions is high in developing settings. Understanding the determinants of abortions in Katete will help improve sexual and reproductive health of the population being studied and beyond.

The research process equally included data cleaning, coding, analysis and writing of reports. The data cleaning process involved checking the consistency of the information collected. Data analysis involved reducing the information further into a concise, descriptive and meaningful form, which will lead to inferences that will inform current policies and programs regarding abortion and reproductive health. The findings were reported to the research ethical committee and the medical superintendent at Saint Francis Hospital. A report was written to the Zambian Ministry of Health through the provincial medical office (PMO-Eastern province).

RESULTS

A total number of 168 women with incomplete abortion, aged 12 to 46 years were included in the study.

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Table 1 Median Participant's Age, Gestational Age, Age at First Sex and Length of Stay

Participants (n=168)	Range	Median
Median length of stay in the hospital	0 to 6 days	2 days
Median gestational age at abortion	5 to 22 weeks	11 weeks
Median age at first sexual intercourse	9 to 30 years	16 years
Median participants age	12 to 46 years	23 years

Note: sexual activities start as early as 9 years in the community being studied.

Table 2 Educational Level and Profession

Profession/Main Activities	Number of Women	Proportions
None	38	22.6%
Pupils	29	17.3%
Housewives	23	13.7%
Small scale famers	52	30.9%
Others	26	15.5%
Total	168	100%

Others include: informal work, sales women, self-employed, student, nurse, teacher, receptionist, and housekeepers.

About 7.7percent of women never went to school and only about 3 percent completed/or are still at college. The median completed level of education was grade 7.

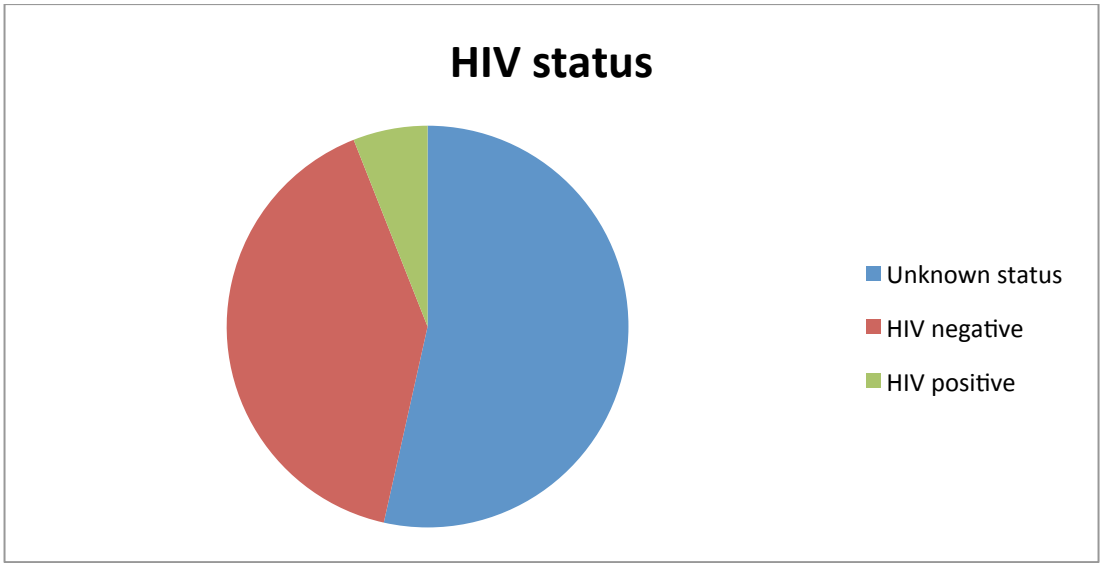

Figure 1 HIV Status among Participants

90 women were HIV status unknown (53.5%), 68 women were HIV negative (40.5%), 10 women were HIV positive (6.0%). 66.2% of participants have had sex with more than one sexual partner, while 33.7% had only one sexual partner. 17 women had no knowledge of modern contraceptive methods (10.1%), 115 women had some knowledge (68.5%) and 36 women had good knowledge on contraception (21.4%). 14.3 % of participants were in polygamous relationships and 35.7% were in unstable relationships (friendships).

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Induced vs Spontaneous Abortions

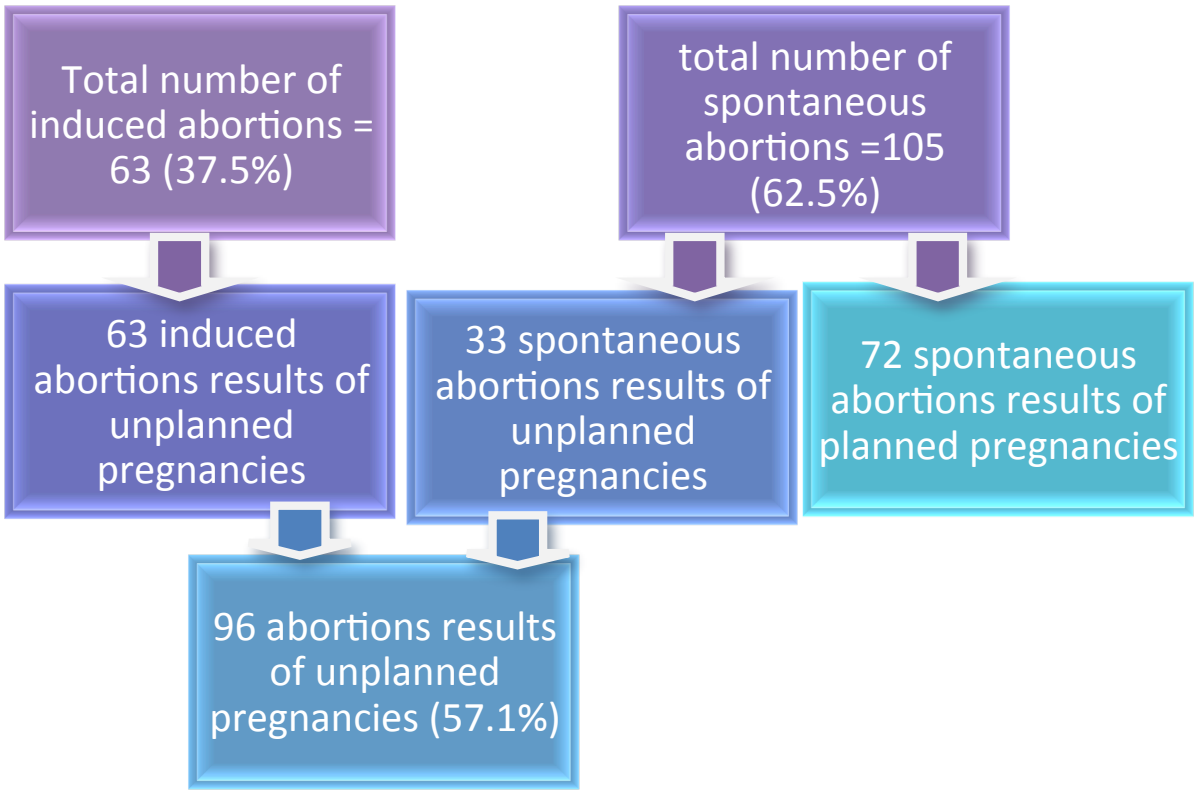

Figure 2 Abortions Flow Chart

Induced abortions represent 37.5% of the total abortions. All induced abortions resulted from unplanned pregnancies. 31.4 percent of spontaneous abortions were the results of unplanned pregnancies while 68.6%resulted from planned pregnancies. 57.1 percent of all abortions were the results of unplanned pregnancies while 42.9 percent resulted from planned pregnancies.

Table 3 Contraceptive Use among Women with Unplanned Pregnancies Related Abortions

Abortions Participants	spontaneous	induced	Total	Percentage
Used contraceptive in the past	19	36	55	57.3%
Did not use contraceptive in the past but have some contraceptive knowledge	12	16	28	29.1%
Did not use contraceptive in the past because of some believes	2	0	2	2.1%
Never used contraceptive and without contraceptive knowledge	0	11	11	11.5%
TOTAL	33	63	96	100%

Out of these 96 women with unmet family planning needs for limiting and spacing, 46 were married, 43 single, 4 divorced, 2 separated, and 1 widow. Negative believes such as modern contraceptives cause cancer and stop fertility were recorded. One patient said she could not use modern contraceptive

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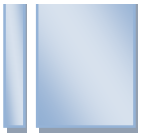

because of medical raisons, having had unilateral salpingectomy for ectopic pregnancy two years ago.
The most commonly used contraceptives among participants were: condoms, combined oral contraceptives, depot medroxyprogesterone acetate (DMPA), norethisterone enantate (NET-EN), and levonogestrel implants (Jadelle).

Even though 57.3% of participants used modern contraceptive in the past, they still were victims of unintended pregnancies resulting in abortions. There is therefore, need to promote consistent and correct use of contraceptives; to strengthen the health care delivery system and maintain the cold chain of contraceptive supply for easy availability and accessibility.

29.1% of participants with unplanned pregnancies related abortions had some knowledge of contraception. As a result, contraceptive knowledge need to be reinforced by education messages on safe sex and reproductive health behaviors. Conjugated efforts by health care providers, community leaders and politicians are needed to extirpate negative believes on modern contraceptives and cultural norms that promote unhealthy sexual life.

Finally, other determinants such as illiteracy, health education, poverty, and increased family planning coverage need to be addressed.

Induced Abortions

47 unplanned and unwanted pregnancies (74.6%) resulted in voluntary termination of pregnancy (TOP). 2 unplanned (but wanted by pregnant teenagers) pregnancies (3.2%) resulted on forced/imposed TOP: one forced by partner in an unstable, concurrent relationship; and the other forced by mother/grandmother because of social concerns (too young to become a mother, unable to afford raising an extra child, unwanted partner). 14 unplanned and unwanted pregnancies (22.2%) resulted in incidental abortions: women received contraceptives while already pregnant. The table below summarizes the reasons and methods used to terminate pregnancies.

Table 4 Motives and Methods to Induce Abortions

Motives for termination of pregnancy	Methods used to terminate pregnancy
Desire to continue with education	Tablets, liquids, instruments, sticks, contraceptives, roots, herbs, including:
Fear to destroy the future	Paracetamol
Feeling ashamed/stigma to become a mother outside wedlock	Combined oral contraceptive (COC)
Fear of being abandoned by partner	Cafenol
Having been abandoned by partner	Indomethacin
Advised by partner	Coartem
Forced by partner	Misoprostol
Partner not fulfilling his responsibility or denying responsibility	Mifepristone
Unfaithful partner, concurrent relationship	Ibuprofen
Forced by parent	Boiled coca cola
Fearing pressure, blame, punishment from parents	Metallic instruments
Feeling too young to become a mother	Cassava sticks in the cervix
Undesired pregnancy from undesired partner	Incidental contraceptive use: COC, depo provera, norethisterone, jadelle.
Unable to afford having a baby	Herbal medicine
Unable to afford another child with a different partner, being unmarried	roots
Unable to afford an extra child, poor income	Traditional medicine
Protect health of existing children	Trees such as: Kankhalamba (Chinchon tree), Munyoka, and Muleza tree
Unplanned, want to farm first (farming season)	

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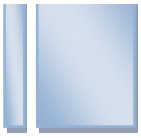

Most youths were involved in unstable relationships, desired to continue with education, feared to ruin their future, had low level and inconsistent use, plus limited knowledge on modern contraceptive methods.

Termination of pregnancy was mainly self-induced, sometimes provided by a lay person such as fellow pupils, community providers, grandmothers, traditional healers, and seldom by a health provider. Abortions were often conducted in homes without minimal required health safety, in the bush, and sometimes in drugstores.

The provider fee amounted from Kwacha 25 to Kwacha 250. Risky cultural norms such as allowing a teenage girl who attains puberty to be spending nights in her own separate room/hut from her parents were reported in 3 cases. This need to be discouraged as it exposes the vulnerable teenager to unsafe sex.

Incidental Termination of Pregnancy

A significant number of women received contraceptives while pregnant. Pregnancy test was not done (either not available or out of stock) before providing family planning services.

Table 5 Incidental Contraceptives Used

Contraceptives	Number of women	Proportions
DMPA	10	0.71429
JADELLE	2	0.14286
COC	1	0.07143
NET-EN	1	0.07143
Total	14	1

DMPA: two women received their first injection of the contraceptive while they were already pregnant (without knowing). Eight women were receiving their subsequent injections (5 on injections for more than a year, 1 for more than two years, 1 for more than three years, and 1 for more than 4 years) without knowing that they were pregnant. No pregnancy test was done.

NET-EN: one woman was on injections for more than two years. She received her latest injection while pregnant (pregnancy test was not done).

Pills: the participant was on combined oral contraceptive for more than two years.

Jadelle: one participant received the implant when about 8 weeks pregnant and the other participant while 4 months post-partum. Pregnancy test was not done.

DISCUSSION

Determinants of abortions have also been discussed elsewhere in the literature [4-7]. The current study is one of the firsts to generate data on abortions in the area. In addition to social, cultural, and behavioral determinants, this study suggests a positive association between inappropriate use of contraceptives by providers and induced abortions (incidental). Further studies investigating storage and quality service provision of contraceptives are needed to address incidental contraceptive related abortions. Study limitation: information under-reporting (on induced abortion) is inevitable in this kind of studies. However, this was minimized by careful selection of interviewers with good communication skills. Selected candidates were further trained on skillful ways to conduct interviews: maintaining respect, confidentiality, and dignity for clients after obtaining a well informed consent.

Poverty should not be an excuse for unsafe sex promotion; we ought to build a responsible society whatsoever the social background. Not everyone in the world will promote abortion services regardless of

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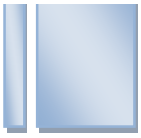

safety. The world is a mixed society. A virtually comprehensive suggestion to uproot this grave public health problem is to prevent future unwanted pregnancies (quality services: information, education, family planning).

RECOMMENDATIONS:

1) Promote integrated reproductive health care services, including: family planning counseling and care, HIV/voluntary counseling and testing, sexually transmitted infection screening and care, and management of abortions (induced/spontaneous). And linkage to other health care services.
2) Ensure that clients have wide and easy access to good quality contraceptive methods in a reliable and sustainable fashion.
3) Inform and educate communities on safe sex and reproductive health.

CONCLUSION

Enabling individuals and couples to determine whether, when, and how many children to have is critical to ensure safe motherhood and healthy families. Voluntary family planning is fundamental to maximize health, economic, and social benefits for families and communities.

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