

MANAGEMENT OUTCOMES OF ABORTION AMONG CHILD BEARING
AGE VISITED ATAT HOSPITAL FOR COMPRESSIVE ABORTION CARE,
GURAGE ZONE SOUTH ETIOPIA



BY

MELESE JOTE (BSC)

A RESEARCH THESIS SUBMITTED TO JIMMA UNIVERSITY, COLLEGE OF PUBLIC
HEALTH AND MEDICAL SCIENCES, RESEARCH AND POST GRADUATE
COORDINATING OFFICE, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE IN INTEGRATED EMERGENCY
OBSTETRICS AND GYNECOLOGY AND GENERAL SURGERY

AUGUST 2014

JIMMA ETHIOPIA

MANAGEMENT OUTCOMES OF ABORTION AMONG CHILD BEARING AGE
WOMEN VISITED ATAT HOSPITAL FOR COMPREHENSIVE ABORTION CARE
GURAG ZONE SOUTH ETHIOPIA

BY

MELESE JOTE (BSC)

ADVISORS;

MR.CHERINET HAILU (CN Dip, MCH, BSN, MPH)

MR. GUGSA NEMERA (MSCN)

AUGUST 2014

JIMMA ETHIOPIA

ABSTRACT

Background; Abortion is termination of pregnancy before fetal viability, which is conventionally taken to be less than 28 weeks from the last normal menstrual period or a birth weight of less than 1000gm. Abortion is more than a medical issue, or an ethical issue, or a legal issue. Thus information on management outcome of abortion is paramount important for regulatory bodies. However, there is paucity of information in this regard particularly in the study area.

Objectives- To assess the management outcome of abortion among child bearing age women visited Attat hospital for abortion care from March 2005-February 2006E.C.

Methods- Facility based cross sectional study design was conducted by collecting data through retrieving available records of clients visited Attat hospital for abortion care from March 2005ec-February 2006ec. Data edited entered and cleaned, into computer then, analyzed using SPSS 16.0.1.statistical software, Logistic regression was done to see the association between the independent and the dependent variables. P-Value <0.05 at 95% CI was taken as statically significant throughout the analysis and finally, the result was presented using texts, tables, and graphs.

Result; A total of 274 abortion case records reviewed at Attat hospital. Majority 111 (40.5%) where age range of 20-34 years, about half 139 (50.7%) were from outside Attat 100(36.5%) were paid >300 birr, 113 (41.3%) had 1-4 delivery, 208 (75.9%) had no history of still birth, 164 (59.9%) had history of abortion once and 104(38%) had gestational age of 8-12 weeks Out of the total clients, 142(51.8%) were presented with incomplete abortion , 65(23.7%) came to hospital with moderate+ degree of complication , 115(42%) was induced abortion 77(28.1%) had known causes for spontaneous abortion,51(18.6%)were self induced, 140(51.1%) were managed by E & C, 97(35.4%) were not improved for mgt. Age, (AOR=0.293(0.2-0.6)/p=0.01,)complication at the time of presentation to hospital(AOR= 0.289, (0.4-0.2)/ p=0.005), and history of still birth(AOR=0.326(0.2-0.7), p v= 0.017), are the independent factor affecting management outcome of abortion at Attat Hospital(at P<0.05)

Conclusion; Age, complication at time of presentation to hospital and history of still birth are the independent factors affecting management outcome of abortion at Attat Hospital. Thus, special emphasis should be given by clinician in Attat Hospital for clients with Age ranges between 20-34 years, with moderate and above degree of complication at the time of presentation to hospital, and history of still birth to overcome poor management outcome of abortion.

Key word: Abortion, Management of abortion, management outcome of abortion.

ACKNOWLEDGMENTS

I would like to express my thanks to God, and to my advisors Mr. Chernet Hailu and Mr. Gugsu Nemera who took their precious time to assist me during the whole process. The genuine and expert-based guidance and stream of feedbacks I got from them was the cornerstone on the process of this study. Also my grateful thanks go to Jimma University and IEOS coordinator office, for technical and, material support.

TABLE OF CONTENTS

<i>ABSTRACT</i>	i
ACKNOWLEDGMENTS.....	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
LIST OF FIGERS.....	v
ACRONYMS	vi
1.1. BACK GROUND.....	1
1.2. PROBLEM STATEMENT	3
CHAPTER TWO:	4
2.1 LITERATURE REVIEW.....	4
2.2 SIGNIFICANCE OF THE STUDY.....	8
2.3 CONCEPTUAL FRAME WORK	9
CHAPTER THREE: OBJECTIVES	10
3.1. GENERAL OBJECTIVES.....	10
3.2. SPECIFIC OBJECTIVES	10
CHAPTER FOUR: METHODOLOGY	11
4.1. STUDY SETTING AND PERIOD	11
4.2. STUDY DESIGN.....	11
4.3. POPULATION.....	11
4.3.1. SOURCE POPULATION	11
4.3.2. STUDY POPULATION.....	11
4.4. INCLUSION AND EXCLUSION CRITERIA.....	11
4.5. SAMPLE SIZE DETERMINATION.....	12
4.5.1 SAMPLING PROCEDURE.....	12
4.6. STUDY VARIABLE	12
4.7. OPERATIONAL DEFINITION	12
4.8. DATACOLLECTION INSTRUMENTS & PROCEDURE.....	13
4.8.1. DATA COLLECTION INSTRUMENTS.....	13
4.8.2. DATA COLLECTION PROCEDURE	13
4.9. DATA PROCESSING & ANALYSIS	13
4.10. DATA QUALITY CONTROL MEASURES	13
4.11. ETHICAL CLEARANCE.....	14
4.12. PLANS FOR DISSEMINATION OF FINDINGS	14
CHAPTER FIVE: RESULTS	15
CHAPTER SIX: DISCUSSION 22	
CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION	26
RE FERENCES.....	28
ANNEX ONE: DATA COLLECTION INSTRUMENTS.....	30
ANNEX II: INFORMATION SHEET AND INFORMED CONSENT	

LIST OF TABLES

Table 1: Socio demographic and economic characteristics of post abortion clients in Atat hospital from March 2005-Feb. 2006 EC.....14

Table 2 Distribution of reproductive health history of clients visited Attat Hospital for post abortion care from March 2005-Feb 2006EC.....15

Table 3 types and causes of abortion for which the client visited Attat hospital for post abortion care from march 2005-Feb. 2006 EC.....16

Table 4: The type of management and management outcome of post abortion clients visited Attat hospital from March 2005-Feb. 2006 EC.....17

Table 5 Bivariate logistic regression.....20

Table 6: Final logistic regression to identify predictors of management outcome of abortion from March 2005-Feb 2006 E C.....21

LIST OF FIGERS

Fig 1 conceptual framework9
Fig 2: The distribution of age for child bearing women in Attat hospital16

ACRONYMS

MVA	Manual vacuum aspiration
E&C	Evacuation & curettage
D&C	Dilatation& curettage
MDGs	Millennium Development Goals
MOH	Ministry of Health
SPSS	Statistical Package for the Social Sciences
STI	Sexual transmitted Infections
SMC	Sharp Metallic Curettage
STDs	Sexually Transmitted Diseases
SAC	Safe Abortion care
IEC	Information, education, and communication
BCC	Behavioral, change, communication
AOR	Adjusted odd ratio
COR	Crude Odds Ratio
CI	Confidence interval
WHO	World health organization

CHAPTER ONE: INTRODUCTION

1.1. BACK GROUND

Abortion is termination of pregnancy before fetal viability, which is conventionally taken to be less than 28 weeks from the last normal menstrual period (LNMP), or a birth weight of less than 1000gm. Abortion is more than a medical issue, or an ethical issue, or a legal issue. It is, above all, a human issue, involving women and men as individuals, as couples, and as members of societies (1). Unsafe abortion is defined as abortion taking place outside of health facilities, place recognized by law and/or provided by an unskilled person (2).

These unsafe abortions carry a high risk of maternal mortality and morbidity, accounting for almost 80,000 maternal deaths each year worldwide (3). Unsafe abortion is a major public health problem in many countries. It is one of the most easily preventable causes of maternal death and ill-health which causes about 13% of global maternal mortality and approximately 20% of overall burden of maternal deaths and long term sexual and reproductive ill-health. A woman dies every eight minutes some were in developing countries due to complications arising from unsafe abortion. Every year nearly 42 million women faced with an unplanned pregnancy decide to have an abortion and about 20 million of them are forced to resort to unsafe abortion (4). In Eastern Africa, an estimated 2.4 million unsafe abortions were performed in 2008, a slight increase since 2003. The unsafe abortion rate declined slightly after 2008, to 36 abortions per 1,000 women of reproductive age, but remains one of the highest in the world(5).

It is estimated that there are 3.27 million pregnancies in Ethiopia every year, of which approximately 500,000 end in either spontaneous or unsafely induced abortion. Statistical returns from health facilities across the country and from hospital-based studies show that unsafe abortion is one of the top 10 causes of hospital admissions among women (1). Currently, 61% of the world's people live in countries where induced abortion is permitted either for a wide range of reasons or without restriction as to reason. In contrast, 26% of all people reside in countries where abortion is generally prohibited (6).

In Ethiopia safe abortion was permitted under certain condition since 2005. Before that abortion was permitted only to save the life of a woman or to protect her physical health. Abortion is now legal in Ethiopia in cases of rape, incest or fetal impairment. In addition, a woman can legally terminate a pregnancy if her life or her child's life is in danger or if continuing the pregnancy or giving birth endangers her life.

A woman may also terminate a pregnancy if she is unable to bring up the child, owing to her status as a minor or to a physical or mental infirmity (1).

Literature shows that even after the law was implemented still unsafe abortion remains common. Four years after the abortion law was liberalized, only a quarter of all abortions in Ethiopia occur in safe and legal settings. A countrywide assessment published in 2010 shows that there were 382,500 abortion performed in Ethiopia in 2008 .out of it 58,600 were performed unsafely, and treated for abortion related complication, and out of these 100 women died from their complications, and many more suffered from related injuries or illnesses. And many women with complications never even reach health care facilities, because they live too far from services, they avoid seeking help because of fear and stigma, or they die before reaching a facility (7).

Another nationwide study conducted in Ethiopia shows that almost 58,000 women sought care for complications of induced or spontaneous abortion in 2008. Three-quarters of the women received care in government facilities. 41 percent had moderate or severe morbidity, such as signs of infection that were likely related to an unsafe abortion. 7 percent of all women had signs of a mechanical injury or a vaginally inserted foreign body. More than 13,000 women seeking post abortion care required a hospital stay of at least 24 hours. The case fatality rate among women seeking post abortion care in public hospitals, where the most serious complications were seen, was 628 per 100,000 (8). However, lack of reliable information or shortage of necessary data on this problem has hampered a number of activities that would have helped in ameliorating the situation.

1.2. PROBLEM STATEMENT

The health consequences related to complications of spontaneous or unsafe induced abortion are devastating for women and their families. Besides long-term disability like infertility, death may be a direct result of unsafe abortion due to complications such as sepsis, hemorrhage, genital and abdominal trauma and perforated uterus are common. Worldwide there are 210 million known pregnancies each year, and out of it 80 million are unintended and 45 million end up in induced abortion out of it 20 million performed safely. Unsafe abortion in Ethiopia contributes 25-50% of maternal death, and approximately 500,000 ends in either spontaneous or unsafely induced abortion or its complication is leading cause of Hospitalization (16). Unsafe abortion is a preventable tragedy and is one of the neglected problems of health care in developing countries including Ethiopia. Annually, an estimated 25,000 women die of pregnancy and delivery complications in Ethiopia (1). And Unsafe abortion has a significant contribution to this high MMR. Unsafe abortions claim the lives of thousands of women who do not have access to life saving abortion services (27). In fact the majority of women still die of incomplete abortion. &, there is a general consensus that statistics about incidence of abortion in general and incomplete abortion in particular are inadequate This is because it is presumed that majority of such cases occur outside health facilities and when even they occur in the hospital, the records are poorly managed. The implication is that not only the incidence maybe underestimated but also the complications and deaths associated with the management of the cases. In addition, strategies informed and developed from the inadequate data do not seem to reduce the burden of incomplete abortion, has misinformed programmed planning and implementation. In addition, there seem not to be a focused attention on peculiar characteristics of women who patronize incomplete abortion procedures. This could be presumed to sharpen evidence that could inform well focused programmed interventions for women who undergo incomplete abortion, majority of which could have been a history of induced abortions (16). Since there is no study done previously on abortion care, and its management outcome in nongovernmental organization this study intended to reveal the prominent type of abortion, reasons behind having abortion, and its possible management outcome at Attat hospital.

CHAPTER TWO:

2.1 LITERATURE REVIEW

2.1.1 Abortion morbidity

The 2008 national rate of women treated in health facilities for abortion complications was 3.5 per 1,000 women aged 15–44 (not shown); the annual rate of women treated in health facilities for complications from induced abortion was 3.2. The rates in Addis Ababa (6.7) and in the combined two urban regions (25.4) were higher than the national average, likely because of better access to health facilities; urban facilities serving women who reside in their cities' environs, spuriously inflating the rates; higher levels of abortion due to an increased likelihood of unmarried young women becoming sexually active and having an unintended pregnancy as the age at marriage rises; and a high prevalence of prostitution study provides the first country-wide estimate of the incidence of induced abortion in Ethiopia (24). An estimated 382,000 abortions occurred in 2008, and the annual abortion rate was 23 per 1,000 women aged 15–44. This rate is much lower than WHO estimated rate for 2003 for Eastern Africa (39 per 1,000), the sub region within which Ethiopia falls, and somewhat lower than the rate for the whole of Africa (29 per 1,000).^{23, 24}.

2.1.2 Magnitude and management of abortion

Reducing high rates of maternal mortality in developing countries has been a major global effort for over 20 years. The adoption of MDG 5 which includes a reduction in maternal mortality by 75% by the year 2015 has especially underscored the need for political commitment and effective interventions to prevent such death. (12)

Worldwide induced abortion rate in 2008 was 28% per 1000 women aged 15-44, in Europe, 27%, in Latin America, 32% in North America 19%, in Asia 29%, in Africa 29% (13)

The annual number of induced abortions in Africa rose between 2003 and 2008, from 5.6 million to 6.4 million. In 2008, the most abortions occurred in Eastern Africa (2.5 million), followed by Western Africa (1.8 million), Northern and Middle Africa (0.9 million), and Southern Africa (0.2 million). The increase in the number of abortions is due largely to increase in the number of women of reproductive age. Of the 6.4 million abortions carried out in 2008, only 3% were performed under safe conditions.

Surveys of knowledgeable health professionals suggest that in Uganda, 23% of women seeking abortions go to traditional practitioners, many of whom employ unsafe techniques, and 56% go to doctors or nurses, who generally provide safer services. Some women try to

induce abortion themselves using highly dangerous methods (15%), while others purchase abortion-inducing drugs from pharmacists or other vendors (7%).

Unsafe abortion is even more common in other countries, including Burkina Faso, where evidence from knowledgeable health professionals indicates that 42% of women obtain abortions from traditional providers and 23% induce abortion themselves. (13)

Roughly one in five pregnancies each year in Nigeria are unplanned; of those, slightly more than half end in abortion. Almost one-third of Nigerian women of child bearing age say they have had an unwanted pregnancy; of those, half have attempted to obtain an abortion at some time. (14) Over 50% of all women seeking abortions in Ethiopia do so outside the reach of trained medical professionals. Unsafe abortion remains the leading cause of death among Ethiopian women of childbearing age, surpassed only by HIV/AIDS. Many Ethiopian women have little or no choice over when or how they become pregnant. Lack of female control over contraceptive use, domestic and sexual violence, early marriage, forced abductions, and poverty often strip Ethiopian women of control over their reproductive lives and lead to unwanted pregnancy (15)

2.1.3 Socio demographic background of abortion clients

The age, educational, religious and marital background of respondents could affect the decision to abort pregnancies especially those unplanned or unintended. In a study in South Africa that examined, the epidemiological relevance of age to incomplete abortion, it was observed that women over 30 years (65.5%) were significantly less likely than those 21- 30 years (75.2%) or under 21 years (76.4%) to have incomplete abortion. This study even though informative compared the rates of types of abortion among ages groups of only abortion clients and did not considered matching such cases with similar ages among persons who deliver in the country. A study in Nigeria by (23) showed that women in Nigeria admitted to the gynecological ward of a hospital in Calabar, Nigeria of childbearing age. There were 19 abortions per 100 pregnancies (or 27 abortions for every 100 live births) (17)

2.1.4 Economic characteristics of abortion clients

Difference in economic backgrounds of women determines the extent to which decisions on management of unintended pregnancies are made. Having a job and earning regular and Sustainable income could influence women decisions in keeping an unplanned pregnancy or terminating it. Women economic empowerment is embedded in the MDGs, and has been advocated for over the years with a single purpose among others to minimize unhealthy maternal experiences including prevention of unsafe abortion and use of family planning. (17,

22)) Demonstrate that the socio-economic status of women with incomplete abortion problem and the type of abortion experienced varies (21).

In Gabon, a qualitative survey of stories of abortion revealed that the main reasons why woman had incomplete abortion were lack of financial and partner support. The economic variable highlighted in the study of women with abortion in Komfo Anokye Teaching Hospital, Ghana, was occupation (22). The authors 13 reported that women who had abortion at the facility were traders, hairdressers, dress-makers, civil and public servants and farmers. In a community survey, it was revealed that the majority of the women (65%) worked outside their homes, and almost half of them were self-employed (17)) this is a reflection of the observation that the incidence of all forms of abortion including incomplete abortion could cut across all professional or occupational backgrounds and consequently on income levels among women.

Ahiadeke, 2001 Elaborates that the major reasons which women in Ghana engaged in abortion included:

Fifty-seven percent (57%) were that they did not want a child 26% cited financial constraints and 17% said that the pregnancy was unplanned. It was evident that women who were self employed had more incidence of abortion than that those unemployed (17).This defeats the perception that unemployed women had higher incidence of abortion than those employed.

2.1.5 Reproductive health history of abortion clients

According to Ahaideka in his study in southern Ghana, more than a third of the women in the study had not given birth before while one quarter had two children. Less than one-fifth of women who had an abortion had one child (17). Almost half of the women (45%) had obtained their abortions before the seventh week of gestation, and 90% had done so before the 10th week. There were very few early second-trimester abortions (at 13-16 weeks), perhaps because of the cost and the risk involved In addition, women who were unmarried had increased odds of obtaining an abortion (OR, 2.3).

Parity of women could influence the incidence of abortion (17).As observed by the odds of having an abortion increased for women who had four or more children (OR, 1.8), suggesting that 11the more children a woman had, the more likely she was to obtain an abortion if she became pregnant .In Romania, where modern method use of contraception is only 30%, the average women have three abortions per live birth (Laurel, 2001). In Georgia, with a contraceptive prevalence rate (CPR) of 20%, the average woman has two abortions per live birth (17). In Nigeria, women seeking care for post abortion complications were more likely

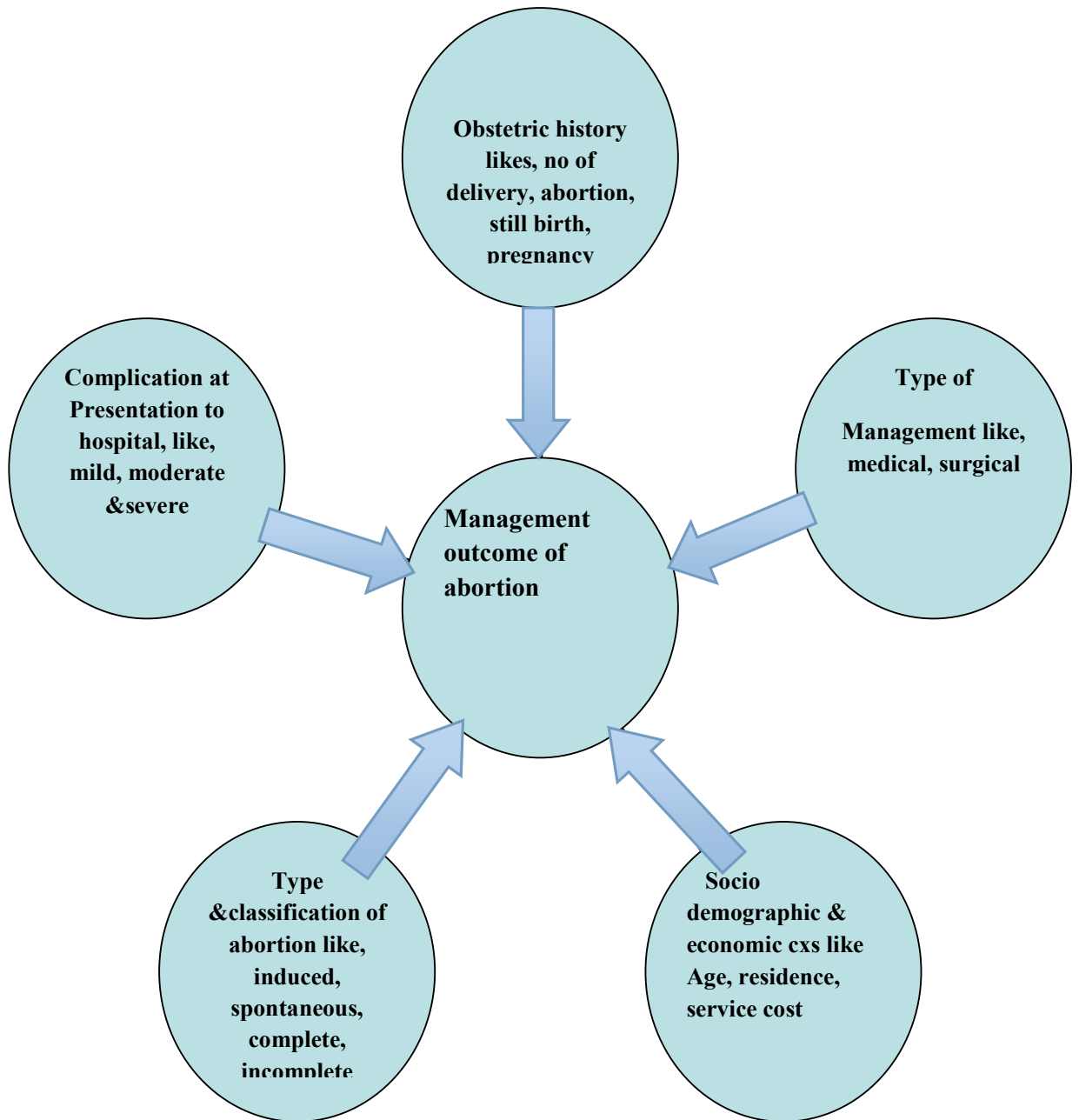
to have had a previous abortion than to have used contraceptive, only 5% had ever use contraceptive while 11% had had a previous abortion (19). The failure of women to plan their families (i.e., to have the number of children they want when they want them) results in unnecessary suffering and costs to the woman and her family and preventable costs to the national health system. In Ukraine, where the modern method CPR is 38%, 60% of women failed to receive contraceptive counseling after abortion. Failure to provide information, education and communication (IEC) and family planning services broadly throughout a country is a lost opportunity for Preventing unnecessary suffering and costs. Failure to do the same after treatment of abortion complications is a second lost opportunity (18).

2.2 Significance of the study

Abortion has been one of the serious maternal problems leading to substantial effect on mother's physical, psychological, social and economical well being. Efforts have been made by governmental and nongovernmental organization to prevent and manage abortion. But, abortion is still the leading cause gynecological treatment seeking among women. However, the management outcome of abortion is not known in Ethiopia in general, at Attat hospital in particular. Thus, this study is proposed to assess management and outcome of abortion in which the result can be used during health planning in Gurage zone and Attat Hospital to evaluate its abortion service. Besides knowing reason behind seeking abortion care and making possible intervention strategy is essential depending on the finding to dramatically reduce maternal death and its complication as well as to contribute to MDG. Furthermore, the finding of the study also serves as base line information for other similar studies that may be conducted in the future.

2.3 . CONCEPTUAL FRAME WORK

As it cannot found similar conceptual frameworks for management outcome of abortion in Ethiopia, a developing country model was adapted, as shown bellow



Fig; 1 conceptual framework

CHAPTER THREE: OBJECTIVES

3.1. GENERAL OBJECTIVES

To assess the management outcome of abortion among child bearing age women visited Attat hospital for abortion care from March 2005-feb 2006ec.

3.2. SPECIFIC OBJECTIVES

1. To asses previous obstetric history and causes of abortion for which the women visited the hospital for post abortion care from March 2005-feb 2006ec.
2. To assess the type of management done for the women visited the hospital for post abortion care from March 2005-feb 2006ec.
3. To identify the management outcome of women with abortion.
4. To identify factors associated with management outcome of abortion.

CHAPTER FOUR: METHODOLOGY

4.1. STUDY SETTING AND PERIOD

Attat District Hospital is found in Guragie zone in the region of SNNPR located 175km Southwest of Addis Ababa and 17km from the town of Welkite. The catchment area for the curative services covers a population of 800,000 and hospital is owned by Ethiopian Catholic Church & managed by medical mission sisters an international religious congregation. The beneficiaries of the service are mainly the residents of Cheha Woreda and the hospital has been operative since 1969 G.C Attat district Hospital serves as a referral center for 35 health centers &for 5 private clinics. The hospital has 113 beds out of which 48 beds are in maternity waiting area (MWA) and 65 beds for inpatient services. The main services provided by the hospital are inpatient and outpatient medical, surgical, pediatrics Obstetrics& Gynecology services. Attat Hospital has 178 staffs. Out of these, 84 are health professional staffs including, one surgeon, one obstetrician & gynecologist, three General practitioners ,three health officers, two health coordinators, two pharmacists, four druggists, forty-four nurses (i.e. thirty-six clinical nurses, three midwifery, three senior expert nurses, one anesthetic and one ophthalmic nurse) and the rest 94 are supportive staffs (2004-2005ec statics of hospital).The data was collected from March 23- April 1, 2006 E.C, by reviewing of patient records who got service from March 2005-February 2006 E.C at Attat hospital. According to the hospital report a total of 274 patients were treated at Attat hospital in the studied year.

4.2. STUDY DESIGN

The study design was cross sectional retrospective review of abortion registration & records.

4.3. POPULATION

4.3.1. SOURCE POPULATION

The source of population was all gynecologic cases from March 2005 EC-Feb 2006 EC.

4.3.2. STUDY POPULATION

All abortion cases with registration and records from March 2005 E.C-Feb 2006 E.C

4.4. INCLUSION AND EXCLUSION CRITERIA

4.4.1. INCLUSION CRITERIA

All abortion cases records from March 2005 E.C-Feb 2006 E.C

4.4.2. EXCLUSION CRITERIA

Records with incomplete information on socio demographic information

4.5. SAMPLE SIZE DETERMINATION

All 274 maternal abortion cases from March 2005 E.C-Feb 2006 E.C was reviewed.

4.5.1 SAMPLING PROCEDURE

All clients with a diagnosis of abortion in gynecology ward were reviewed by using card number. And the patients' charts were accessed by using card number and all necessary data were collected using check lists.

4.6. STUDY VARIABLE

4.6.1. DEPENDENT VARIABLE

Management outcome of abortion

4.6.2. INDEPENDENT VARIABLES,

Age

Residence

Presenting symptoms

Obstetric history

Type/clinical classification of abortion

Types of management

4.7. OPERATIONAL DEFINITION

Medical abortion: termination of pregnancy using of drugs in specified dosage

Surgical abortion: termination of pregnancy using instruments like manual vacuum aspiration, dilatation curettage, and evacuate and curettage

Routine abortion management: A management given for mild degree of complication of abortion, with uterotonic drugs ergometrine, pitocine and oral antibiotics etc

Invasive abortion management: A management given for moderate and above degree of complication of abortion with surgical and medical, IV antibiotics, transfusion, etc

Management outcome: -The treatment approach of clients whether improved or not improved.

Improved; clients who had abortion care and with no more complication.

Not Improved; clients who had abortion care and presented with further complication

Mild complication: abortion with mild degree of complications, without progressive symptoms on complications

Moderate complication: abortion with moderate degree of progressive symptoms on complications, anemia, infection, hemorrhagic/septic shock

Severe complication: abortion with high degree of progressive symptoms on complications, which may need Laparotomy for perforated uterus, pelvic abscess, and/or generalized peritonitis

4.8. DATACOLLECTION INSTRUMENTS & PROCEDURE

4.8.1. DATA COLLECTION INSTRUMENTS

The data was collected by using record review checklist. The checklist contains information on socio demographic, reproductive health history, obstetric history, type of abortion, its management and management outcome of abortion.

4.8.2. DATA COLLECTION PROCEDURE

The data was collected by trained two Bsc nurses. There was a regular supervision of the data collection by one health officer on daily basis so as to ensure the collected data were complete. Incomplete data were corrected on the spot through communication of the data collector and the supervisor.

4.9. DATA PROCESSING & ANALYSIS

Data were entered into a data entry template in Statistical Package for the SPSS version 16.0.1. Data entered were cleaned before analysis done. Then descriptive analyses were employed. A p-values less than 0.05 and Odds ratio test was used to assess for the presence of association between the dependent and the independent variables in the socio-demographic characteristics, medical history, reproductive history, and type of abortion. Graphical presentation such as tables, graphs and charts were presented in the results chapter to illustrate these findings.

4.10. DATA QUALITY CONTROL MEASURES

Training and Orientation over questionnaire was given for data collectors and supervisor. Data was collected after pre-testing of 5% the instrument, of similar subjects visited the hospital on days not included in the study. So, corrections were made accordingly. The Principal investigator and health officer were supervising the data collection on daily basis

for completeness and consistence of the filled questionnaires. In addition to this the data was thoroughly edited, cleaned and entered, carefully before commencement of analysis.

4.11. ETHICAL CLEARANCE

Ethical clearance for the study was obtained initially from institutional ethical review board of, college of public health and medical science, Jimma University. In addition to this, permission was sought from the District Health Administration, of Attat hospital. Confidentiality was insured by not recording name of clients on the questionnaire.

4.12. PLANS FOR DISSEMINATION OF FINDINGS

The results of the study will be submitted to IEOS coordinating office in the college of public health and medical science, Jimma University. The study findings will also be disseminated to SNNPRS, health department. Additionally, the result will be presented in different related seminars or workshops and at the end it will be sent for publication on journal of high scientific repute.

CHAPTER FIVE: RESULTS

5.1 Socio demographic and economic characteristics

A total of 274 patient charts reviewed at Attat hospital in the studied year. From the total clients who experienced abortion 111 (40.5%) were age group of 20-34 years (36.9%) were age group of 35- 49 years and the rests (62%) were age group of 35-49 years with the mean age of 34.9 +3 years. Most of the clients 139 (50.7%) were from other town and villages around the hospitals, outside Attat. Out of the total clients, 109 (39.8%) were paid 100-199 birr, 100(36.5%) were paid 300-400 birr, the rests (65%) were paid <100 birr with mean cost of 237.2 birr. **(Table1)**.

Table 1: Socio demographic and economic characteristics of abortion cases in Attat hospital from March 2005-Feb. 2006 EC

Variables		Frequency(n=274)	%
Residence	Attat	135	49.3
	Outside Attat	139	50.7
Service costs	<100 birr	65	23.7
	100-299 birr	109	39.8
	300-400	100	36.5

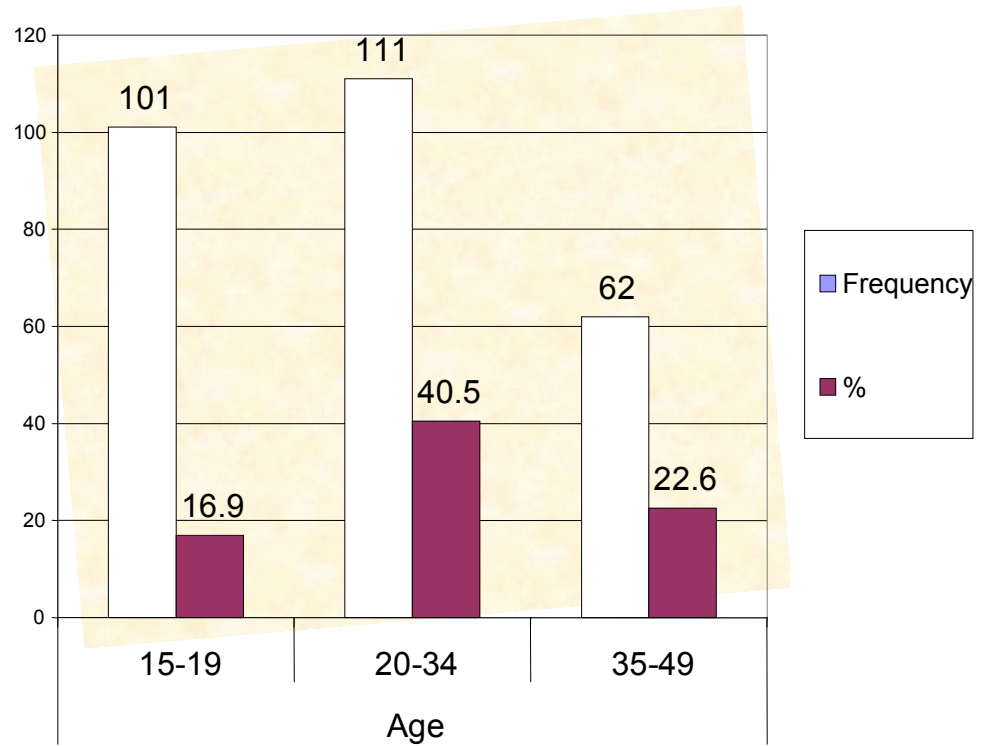


Fig 2: The distribution of age for child bearing women in Attat hospital

5.2 Reproductive health history

Regarding reproductive health history, 140 (51.1%) of them had two and above pregnancies, 113 (41.3%) had 1-4 delivery, 208 (75.9%) had no history of still birth, and 164 (59.9%) had history of abortion once 104(38%) had gestational age within eight to twelve weeks (**Table2**

Table 2 Distribution of reproductive health history of clients visited Attat Hospital for post abortion care from March 2005-Feb 2006 EC

Variables		Frequency n=274	%
Number of pregnancy	One	134	48.9
	two +	140	51.1
No of delivery	None	65	23.7
	1-4	113	41.3
	5+	96	35
Number of still birth	None	208	75.9
	One+	66	24.1
No of abortion	One	164	59.9
	Two+	110	40.1
Gestational age during present abortion	<8 weeks	98	35.8
	8-12weeks	104	38
	13-28 weeks	72	26.2

5.3 Types and cause of abortion

Out of the total clients, 142(51.8%) were presented with incomplete abortion and the rests 132 (48.2%) were presented with other than incomplete abortion like, threatened, missed, and inevitable abortion. The majorities of clients 209(76.3%) were came to hospital with mild degree of complication like vaginal bleeding, lower abdominal pain and the rests 65(25.7%) were came with moderate and above degree of complication like shock sepsis and severe anemia. Concerning type of abortion 159 (58%) were spontaneous abortion and, 115(42%) was induced abortion. Among the total induced abortion, those 64 (23.4%) were induced by health professional at rural health center and, the rests 51(18.6%) were induced by the women themselves. Out of the total spontaneous abortion clients, 82(29.9%) had unknown causes for spontaneous abortion and the rests 77(28.1%) were due to other known causes like, malaria, anemia, and trauma causes for spontaneous abortion (**Table 3**).

Table 3: Types and causes of abortion for which the client visited Attat hospital for abortion care from march 2005-Feb. 2006 EC

variables		frequency n=274	%
Patient status(clinical type of abortion)	Incomplete	142	51.8
	Other than incomplete	132	48.2
Degree of Complication at Presentation to hospital	Mild complication	209	76.3
	Moderate+ (sepsis, severe anemia)	65	23.7
Causes of abortion	Spontaneous	159	58
	Induced	115	42
Causes for induced abortion	Self induced	51	18.6
	Medical abortion	64	23.4
Causes of spontaneous Abortion	Unknown	82	29.9
	Known(trauma, malaria)	77	28.1

5.4 Type of management and management outcome

Among the management procedure done for the clients 140(51.1%) were Evacuation & Curettage and the rests 134(48.9%) were Dilatation & Curettage. Concerning overall medical management given for the clients 177(64.6) were treated by routine medical management of abortion with uterotonic drugs like, pitocine and ergometrine after procedure and the rests 97(35.4%) were treated with others invasive medical management with, IV antibiotics, blood transfusion too routine management.

Among the total clients managed for abortion 177(64.6%) were improved and the rests 97(35.4%) were not improved. Out of not improved clients, 57(20.8%) were having only mild complication and the rests 40 (14.6%) were having moderate and above degree of complication like, severe anemia, and sepsis. Concerning length of hospital stay 77(28.1%) were admitted in the hospital for three and above days and the rests 197(71.9%) were admitted in the hospital only for six hours to two days with mean age of 1.7days (**Table 4**).

Table 4: Type of management done and management outcome of abortion for clients visited Attat hospital from March 2005-Feb. 2006 E.C

variables		frequency n=274	%
Management procedure	E&C*	140	51.1
	D&C**	134	48.9
Over all medical management	Routine mgt ***	177	64.6
	Invasive mgt ****	97	35.4
management Outcome	Improved	177	64.6
	Not improved	97	35.4
Complication of abortion after management	Mild degree	57	20.8
	Moderate + degree	40	14.6
Days of hospital stay	Hours to two days	197	71.9
	Three to seven days	77	28.1

NB * E&C (Evacuation & curettage)

**D&C (Dilatation & curettage)

*** Routine mgt, by medical drugs like, pitocine ergometrine and, oral antibiotics

**** Invasive mgt, like IV antibiotics, blood transfusion

5.5 Bivariate association of variable with management outcome of abortion

Bivariate logistic regression analysis shows that, age(COR=95%CI p= 0.2), History of still births(COR=95 %CI p= 0.2), history of abortion(COR=95 %CI p= 0.07), degree of Complication at presentation to hospital(COR=95 %CI p= 0.001), Causes for spontaneous abortion(COR=95 %CI p= 0.1), and Length of hospital stay(COR=95 %CI p= 0.1),all had association with Mgt outcome of abortion.

Table 5: Bivariate association of variable with management outcome of abortion from March 2005-Feb 2006 EC (n=274

Variables		Management outcome of abortion		COR(95% CI)	P value
		Improved N (%)	Not Improved N (%)		
Age	15-20 years	56(55.4)	45(44.6)	0.637(0.331-1.229)	0.179
	20-34years	80(72.1)	31(27.9)	1	
	>35years	41(66.1)	21(33.9)	1.322(0.677-2.582)	0.414
Residence	Attat	84(62.2)	51(37.8)	0.815(0.496-1.338)	0.418
	Outside Attat	93(66.9)	46(33.1)	1	
Costs	<100	39(60)	26(40)	0.808(0.424-1.538)	0.516
	100-299	73(67)	36(33)	1	
	300+	65(65)	35(35)	1.092(0.616-1.963)	0.764
No of pregnancy	One	84(62.7)	55(37.3)	0.848(0.517-1.394)	0.517
	Two+	93(66.9)	47(33.6)	1	
No of delivery	None	44(67.7)	21(32.3)	1	
	One-four	75(66.4)	38(33.6)	1.373(0.708-2.660)	0.348
	Five+	58(60.4)	38(39.6)	1.293(0.735-2.276)	0.373
No of still birth	None	139(66.8)	69(33.2)	1	
	One+	38(57.6)	28(42.4)	1.484(0.842-2.617)	0.172
No of abortion	One	113(68.9)	51(31.1)	1	
	Two+	64(58.2)	46(41.8)	1.593(0.963-2.633)	0.070
Patient status	Incomplete	95(66.9)	47(33.1)	1	
	Others(missed, threatened, complete, inevitable)	82(62.1)	50(37.9)	1.232(0.751-2.0240)	0.409
Degree of Complication at Presentation to hospital	Mild(bleeding)	146(69.9)	63(30.1)	1	
	Moderate+ (sepsis, shock)	31(44.7)	34(52.3)	2.542(1.438-4.4921)	0.001* *
Type of abortion	Spontaneous	101(63.5)	58(36.5)	0.894(0.540-1.478)	0.661
	Induced	76(66.1)	39(33.9)	1	

Causes for induced abortion	Self	29(56.9)	22(43.1)	0.962(0.457-2.042)	0.919
	Medical	37(57.8)	27(42.2)	1	
Causes for spontaneous abortion	Unknown	63(76.8)	19(23.2)	1	
	Others(AFI, trauma, P.F malaria)	51(66.2)	26(33.8)	1.690(0.842-3.395)	0.140
Gestational age	<8 weeks	67(68.4)	31(31.6)	1	
	8-12 weeks	63(60.6)	41(39.4)	1.150(0.603-2.192)	0.672
	13-28 weeks	47(65.3)	25(34.7)	0.817(0.438-1.526)	0.527
Mgt procedure	E&C	88(62.9)	52(37.1)	0.856(0.521-1.405)	0.538
	D&C	89(66.4)	45(33.6)	1	
Overall medical mgt	Routine mgt	116(65.5)	61(34.5)	1	
	Others	61(62.9)	36(37.1)	1.122(0.670-1.879)	0.661
Complication of abortion after mgt	Mild	37(64.9)	20(35.1)	0.702(0.291-1.695)	0.431
	Moderate+(shock sepsis)	29(72.5)	11(27.5)	1	
Length of hospital stay	Hrs-day	122(61.9)	75(38.1)	0.651(0.367-1.153)	0.141
	Two+ days	55(71.4)	22(28.6)	1	

5.6 Factors affecting management outcome of abortion.

However multiple logistic regression analysis indicated that, age groups 20-34 years, clients with recurrent still birth, and moderate and above degree of Complication at presentation to hospital, was independent predictors of management outcome of abortion. As it was compared age groups 20-34 years old clients have 71% unit less probability to improve for abortion care than age groups of 15-19 years(AOR 0.293(0.2-0.6)/p=0.01). Clients with one and above still births have 67 % unit less probability to improve for abortion care than with no still births. (AOR=0.326(0.2-0.7)/ p=0.02).

Clients presented with moderate and above degree of complication like severe anemia, sepsis to the hospital have 79% unit less likely to improve for abortion care than those who presented with mild degree of complication (AOR=0.289(0.4-0.2)/ p=0.005) (**Table 5**).

Table 6: Final logistic regression to identify predictors of management outcome of abortion from March 2005-Feb 2006 (n=274)

Variables		Management outcome		COR(95%CI)/P	AOR(95%CI)/p
		Improved	Not improved		
Age	15-19	56(55.4)	45(44.6)	1	1
	20-34	80(72.1)	31(27.9)	0.6(0.331-1.3)/0.2	(0.2930.264-1.653) / 0.01**
	35-49	41(66.1)	21(33.9)	1.3(0.7-2.6)/0.4	0.4(0.806-6.3220)/0.1
History of Still birth	None	139(66.8)	69(33.2)	1	1
	One+	38(57.6)	28(42.4)	1.5(0.8-2.6)/0.2	0.326(1.224-7.669)/ 0.02**
History of abortion	One	146(69.9)	63(30.1)	1	1
	Two+	31(44.7)	34(52.3)	1.6(0.9-2.6)/0.07	0.567(0.816-3.813)0.1
Complication at presentation	Mild	29(56.9)	22(43.1)	1	1
	Moderate+	37(57.8)	27(42.2)	2.5(1.4-4.5)/0.001	0.289(1.452-8.224)/ 0.005**
Causes for spontaneous abortion	Unknown	63(76.8)	19(23.2)	1	1
	known	51(66.2)	26(33.8)	1.7(0.8-3.4)/0.1	0.494(0.938-4.361)0.07
Length of hospital stay	Hrs-two days	122(61.9)	75(38.1)	1	1
	Three-seven	55(71.4)	22(28.6)	0.6(0.4-1.2)/0.1	0.523(0.215-1.270)0.15

NB * p value<0.05*

P value<0.01**

CHAPTER SIX: DISCUSSION

This study was aimed to investigate the type of abortion, management done, management outcome of abortion and associated factors of management outcome of abortion. Bivariate logistic regression analysis, indicated age, no of still births, no of abortion, degree of Complication at presentation to hospital, Causes for spontaneous abortion and Length of hospital stay, have Association with Management outcome of abortion. Multivariate logistic regression analysis indicated Age group twenty to thirty-four, greater than thirty five years, having history of two and above number of still births as well as having moderate and above degree of complication at presentation to hospital has strong association with management outcome of abortion.

Residence, type of abortion no of pregnancy, number of delivery, causes of induced abortion, reason for induced abortion, cost of abortion overall management, complication of abortion after mgt, gestational age, had no association with management outcome of abortion. The differences might be due to deference's; in settings, type of study and sample size we used varies from other study. This study clearly showed the serious problem of management of abortion in Attat hospital. It is one of NGO, religious hospital which doesn't accept legal abortion and, only giving post abortion care for those who experienced complication and came for further management.

The finding indicated that 42% were induced abortion which is two times higher than that of similar study conducted by Sedge G et al. 2007, in Burkina Faso (13%). Also the study revealed that the prevalence of induced abortion is high at this hospital as compared with study by Ahiadeke 2001 at Southern Ghana average rate of 5.7\1000 women per year in all developing regions (17). Presently the issue of abortion is sensitive and in our study induced abortion is high as compared with others, and it might be due to poor health coverage of Gurage zone to mobilize community.

The finding indicated that out of induced abortion cases (18.6%) were self induced abortion (by using herbal drugs) which is higher than similar study conducted at Addis Ababa 2000 by Tekle-Ab Mekbib1, Yirgu G/Hiwot 13% and by Sedge G et al. 2007 Uganda 15%. (27, 13). As it is known self induced abortion is risk for complication like hemorrhage, sepsis, and others, which complicate the outcome of post abortion care.

According to the study conducted by Ahiadeke, 2001 at Southern Ghana, clients with induced abortion have less likely to utilize post abortion care, Furthermore, suggestion was that women seeking care at hospitals for complications of abortions are often viewed as criminals and verbally admonished. The social stigma and the stress associated with comments that may be made by close and distant associate affect such women negatively and these reasons might be the same causes of for our study (17).

Legal abortion is forbidden at Attat hospital due to religion but, According to WHO. global and regional estimate 2007 study Legalization of abortion in developed countries has been identified to have promoted access to safe abortion and also we have high incidence of unsafe abortion in developing countries, so the absence of legal abortion might contribute for self induced abortion(4).

Clients presented with moderate and above degree of complication have 70% less probability to improve for abortion care than those with mild degree of complication (AOR= 0.289, (0.4-0.2)/ p=0.005).As degree of complication increase management outcome of abortion is poor. The study revealed that 23.7%of clients were presented with moderate and severe degree of morbidity. It has similar explanation as Tekle-Ab Mekbib¹, Yirgu G/Hiwot ² (modified Delphi technique), of presentation with moderate and severe complication had its own impact on management outcome of abortion. So, this study gives clue for the necessity of standard and appropriate management of abortion cases (27).

The other determinant of this study for spontaneous abortion was health problem. Out of 58% of spontaneous abortion 29.9% were presented with unknown causes and, the rests 28.1% were due to known causes like AFI malaria, anemia and trauma. Clients who have other causes like AFI malaria, anemia and trauma for spontaneous abortion have less probability to improve for abortion care than unknown causes for spontaneous abortion. The reason is the same with Haillemichael G et al. 2010 study, Carring for women with abortion complication, the life style that pregnant mothers did not use optimal nutrition during pregnancy, endemic disease and the distribution and capacity of health institutions to address maternal health problem as early as possible might be also poor and affect management (8). As we early detect the causes and treat abortion the likelihood of developing further complication is less.

The study revealed that those clients who have one and above still birth have 68% less probability to improve for abortion care than those who doesn't have still births (AOR=0.326(0.2-0.7), p v= 0.017). It might be due to previous exposure to obstetric and gynecologic complication, like habitual abortion, and still births due to chronic diseases. And the same is true for abortion. As the recurrences of abortions and still births increase the probability of complication is high.

Concerning Gestational age 26.2% were thirteen and above weeks which is three times higher than that of study conducted at Ahiadeke2001 10% have gestation age >13 weeks which might be risk for post abortion complication (17). These might be the reason for not improved abortion cases in our study.

The majority of procedure, 51.1% was Evacuation and Curettage, hence there is no other setup like MVA procedure in the hospital, and in this study type of procedure had not statistically significant association with management outcome of abortion, so the reason might be due to sample size, settings and type of study.

The finding also indicated that 35.4% of clients were not improved for abortion management and, which is two to three times higher than study conducted by WHO global and regional estimate2007, 13%, and, study conducted at Addis Ababa 2000 15%, were not improved for abortion mgt due to poor setup, and stayed at hospital for further days (4, 27). And out of not improved 14.6% were developed complication like anemia, sepsis and shock. The reason might be due to less Utilization and Strengthening of post abortion care services at grass root level of gurage zone especially Attat hospital.

Concerning overall medical management given for the clients 177(64.6) were treated by routine medical management of abortion with drugs like, pitocine and ergometrine after procedure and the rests 97(35.4%) were treated with invasive medical management like, IV fluid resuscitation, blood transfusion, in addition to routine medical management.

The study revealed that clients with age range between 20-34 years, had 70% less probability to improve for abortion care than age range between 15-19 years ages (AOR =0.293(0.2-0.6 p v=0.011).the reason might be high parity, history of previous complication for abortion, and, middle age are vulnerable for disease and young age had good recovery.

The study also revealed that age range above >35 years have less probability to improve for abortion care than 15-19 years. (AOR=0.4(0.8-6.3) p v=0.121) and, it was known that Grand multi are the most exposed age groups for obstetric and gynecological complication, so as the clients aged management outcome of abortion is poor. Majority of the clients, 40.5% were between the age ranges of 20 – 34 years which has similar findings of other studies conducted in Ethiopia by Abdulla. A over 40% of the unsafe abortion among adolescents in developing world occur in Africa and 25% of the all estimated unsafe abortions are among adolescents Our finding is consistent to study finding in Ethiopia and most developing countries(25).

Also similar study conducted at Addis Ababa 2000 showed that of 976 young women interviewed who had induced abortion half of them were 15-24 years old. These are a highly sexual active and the most reproductive age groups who may engage in sexual relations most often unprotected and the result is unintended pregnancies. For the cases, obviously such pregnancies may not be desirable at all and hence usually induced (27).

Among the total clients 77(28.1%) were admitted in the hospital for three and above days. generally obstetric and post abortion clients were discharged after six hours unless complicated. As the date of admission increases the chance of getting further hospital acquired infection is high, which might influence management outcome of abortion.

The fact that the study is conducted on the current sexual and reproductive issue is considered to be strength of the study. However, the use of secondary data to judge on the management outcome of abortion where the information initially not collected for this study purpose which might affect the validity is the possible limitation

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1 CONCLUSION

Spontaneous abortion is the prominent causes for seeking abortion management and Evacuation and curettage is management procedure mostly done for abortion cases at Attat hospital. About one third of clients had non-improved outcome and developed further complication. Age, complication at the time of presentation to hospital and history of still birth are the independent factor affecting management outcome of abortion at Attat Hospital.

7.2 RECOMMENDATION

7.2.1 Recommendations to Health biro of SNNPRS

- ❖ Since majority of the client came to Attat Hospital for gynecological management after induction of abortion out of the hospital, public awareness activities should be conducted by Gurage zone health department to enhance compressive abortion care at Attat hospital, thus to improve management outcome of clients seeking abortion care
- ❖ Special emphasis should be given by clinician in Attat Hospital for clients with Age between 20-34 years, complication at the time of presentation to hospital and history of still birth to overcome poor management outcome of abortion.
- ❖ Further large scale and prospective study should be carried out to determine predictors of management outcome of abortion

REFERENCES

1. **FMOH.** Technical and procedural guide line for safe abortion service in Ethiopia. Ethiopia, Addis Abeba : june 2006.
2. **Ahman E, Dolen C, Sha L.** The global burden of unsafe abortion in the year 2000. **Global burden of disease 2000**
3. **IPPF.** Imap Statement on safe abortion , England : IPPF medical buletin, October 2001, Vol. 35, p. volume 35. 5.
4. **WHO.** global and regional estimate of incidence of unsafe abortion and associated mortality in 2003. Geneva : 5th edition, 2007.
5. **Hussain R.** Abortion and unintended pregnancy in Kenya. New York : **Guttmarker Institute**, 2012.
6. **Center for reproductive right.** Worlds abortion law.. New York , may 2008.
7. **A, Fernanda.** New study providers, first countrywide assesment of abortion in Ethiopia. Guttmacher Institute, 2011.
8. **Haillemichael G et al.** Carring for women with abortion complication in Ethiopia: national estimate and future implications. International perspectives on sexual and reproductive health , March 2010, Vol. 36, no 1.
9. **Tamara F, Akinsew A, Oji E.** Putting quality first: an assesment of post abortion care service at Murtala Muhammed specialist hospital. Kano, Niger : Ipas, 2004.
10. **Stephen N, Kinozi M.** Monography on complications of unsafe abortion in Africa. ISBN 0-929817-38-9.
11. **Gebrehiwot Y, Tippawa I.** Trends of abortions complications in transtion of abortion law revision in Ethiopia. *J. of Public Health* (2009) 31(1):81-87
12. **Benson J et al.** Monitoring safe abortion services in Ethiopia: Testing model to improve service availability and quality. IUSSP, Marrakech, Morocco, September 2009.

13. **Sedge G et al.** Induced abortion: estimated rates and trends worldwide *Lancet*, 2007; 370: 1338–45
14. **Akinrinola B et al.** Cause and consequence of induced abortion and unintended pregnancy in Nigeria in 2006. New York, Guttmacher Institute, 2006
15. **Mgbako, Chi.** Ethiopia: US. Foreign policy and unsafe abortion in Africa. August 3 2010, www.afrik-news.com/article18069.html
16. **WorldHealthOrganization(WHO).** Maternal mortality in. Available at: http://www.who.int/reproductivehealth/publications/maternal_mortality_2005/mme_2005 retrieved 2005 1,03,201
17. **Ahiadeke C.** Incidence of induced abortion in Southern Ghana *International Family Planning Perspectives*, (2001) 27(2), 96-101, 108
18. **Laurel, C.)** Global evaluation of USAIDS post-abortion care program USA (2001)
19. **Okonofua FE, Odimegwu C, Ajobor H, Daru PH, Johnson A.** Assessing the prevalence and determinants of unwanted pregnancy and induced abortion in Nigeria *Stud Family Planning* (2004).30: 67–77. 18
20. **Rogo K.** Improving technologies to reduce abortion-related morbidity and mortality, *Int J Gynaecol Obstet.* (2004). Vol. 85, Suppl 1, 73-82
21. **Rosanna, F. Hess, D.N.P.** Women's Stories of Abortion in Southern Gabon, *Africa Journal of Transcultural Nursing*, (2007) Vol. 18, No. 1, 41-48
22. **Turpin, C., Danso, K., & Odoi, A.** Abortion at Komfo Anokye teaching hospital. *Ghana Medical Journal*, (2002) 36(2), 60-64
23. **Strahan, T. W.** Pregnancy-Related Deaths of African Women (II) *Association for Interdisciplinary Research in Values and Social Change*, (1999) Vol. 13, No. 3
24. **International Perspectives on Sexual and Reproductive Health.** The Estimated Incidence of Induced Abortion In Ethiopia 2008 *19 2010,36* (1):16–25
25. **Abdulla A.** Socio-Economic Determinants Of Abortion Rates, <http://ideas.repec.org/cgi-bin/ref.cgi?handle=RePEc:uam:wpaper:201002&output=0>, Oct 2004, accessed on 16/10/2010`1

26. **Shah, I., Ahman. , E.**, Age patterns of unsafe Abortion in developing Country Regions. *Reproductive health Matters* 4002: 12(24) 9-17
27. **Tekle-Ab Mekbib¹, Yirgu G/Hiwot² Misganaw Fantahun³** Ethiopian Journal of Reproductive Health Survey of unsafe abortion Delphi technique, and taking the six months study period , May 2007 Volume 1, Number 1
28. **Lukman H** monography on abortion,compltion and analysis of available studies in ethiopia,med j32(3);1519.

ANNEX ONE:

DATA COLLECTION INSTRUMENTS

QUESTIONNAIRE

Jimma university student research program questionnaire format to assess types causes management and management outcomes of abortion among clients visited Attat hospital for abortion care.

Instruction; Only for Women of childbearing age (15-49) years who had a recorded diagnosis of abortion in their hospital record (chart).

Circle or tick the response and write their expression clearly on the space provided. (More than one answers is possible)

Name of data collector: Date / Time Interview: ...

Code Number of client.....

PART 1- Socio demographic and economic characteristics of clients visited Attat Hospital for abortion care from March 2005-Feb 2006 EC

110 Age of patient:

- 1. 15- 19
- 2. 20-34
- 3. 35-49

120 place of residence 1Attat

2 outside Attat

130 What was the service cost of the client during this abortion?

- 1 <100 birr
- 2 100-299 birr
- 3 300-400 birr

PART II Distribution of reproductive health history of clients visited Attat Hospital for abortion care from March 2005-Feb 2006 EC.

210. How many times have she been pregnant in her life?

1. Once
2. Two +

220. How many delivers did she have?

1. None
2. one – Four
3. Five+

230. How many still births did she have?

1. None
2. One+

240. How many abortions did she have?

- 1 One
- 2 Two +

250 How long for the gestational age of present abortion?

- 1 < 8week
- 2 8-12 weeks
- 3 13-28 weeks

PART III The types and causes of abortion for which the client visited Attat hospital for abortion care from march 2005-Feb. 2006 EC.

310. Patient status (clinical types of abortion)

1. Incomplete abortion
2. other than incomplete abortion

320 How does the mother presented to the hospital during this abortion?

- 1 mild complication, like vaginal bleeding abdominal pain
- 2 moderate + (sepsis, shock, etc)

330 which type of abortion was the recent abortion in the past one year?

1. Spontaneous abortion
2. Induced abortion

340 If induced, specify the causes

- 1 self induced
2. Medical induced

350 If spontaneous what was the causes

- 1 unknown
- 2 known (trauma, AFI, malaria, anemia, etc)

PART IV The type of management done for clients visited Attat hospital for post abortion care from March 2005-Feb. 2006 EC

410 What procedure performed to manage the recent abortion encountered in the past one year?

- 1 Evacuation& Curettage
- 2 Dilatation & Curettage

420 what overall medical management given to the client during this abortion?

- 1 Routine abortion mgt with, medical drugs like, pitocine, ergometrine and, oral antibiotics)
- 2 Invasive mgt with, IV antibiotics, and blood transfusion)

430 For how long did the client stayed to the hospital during this abortion?

- 1 Six hours -two days
- 2 Three seven days

PART V The management outcome of abortion for clients visited Attat hospital for post abortion care from March 2005-Feb. 2006 EC

510 what was the outcome of the management

- 1 Improved with no more complication
- 2 Not improved with more complication

520 If not improved what was the degree of complication

- 1 Mild (bleeding, pain etc)
- 2 Moderate+ (sepsis, shock peritonitis, pelvic abscess etc)

Name of data collector.....

Sign & date.....