

## Trends in the Pattern of Induced Abortions in Ilorin

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### Abstract

**Context:** Induced abortion remains a major cause of maternal mortality in developing countries. Reports from Nigeria put its contribution to maternal death at between 15-40%. Prevention of maternal mortality project (Which tries to eliminate hospital delay in the treatment of complication of induced abortion) was introduced in Ilorin over a decade ago. There is need to review its impact on mortality from induced abortion.

**Objectives:** To determine Social-demographic factors associated with induced abortion complications. To determine mortality pattern from induced abortion in Ilorin.

**Study Design:** A descriptive retrospective study. Data was generated from case notes of patients treated for complications from induced abortion in a teaching hospital in Nigeria, to identify social-demographic factors associated with induced abortion.

**Outcome measure:** Maternal death, specific complications. Prevalence of induced abortion.

**Results:** Induced abortion accounted for 3.28 percent of gynecological admission. Case fatality rate is 61.0 per 1000. Multiple complications is common, Age group 24 years and below accounted for 73.05%. Causes of death are hemorrhage and septicemia.

**Conclusion:** Mortality from induced abortion has not changed significantly despite the implementation of prevention of maternal mortality project in Ilorin. There is need to redefine intervention strategy. Effort to increase contraceptive use especially by single women will reduce unwanted pregnancy and by extension induced abortion with its attendant complications.

**Key words:** Induced Abortion, Maternal Mortality, Trend.

### Introduction

Induced abortion is a recurrent issue in maternal morbidity and mortality in developing countries especially the sub-Saharan Africa<sup>1,2,3,4</sup>. Worldwide latest estimates suggest that some 19 million unsafe abortions are carried out annually, nearly all of them in developing countries<sup>5</sup>. Unsafe abortion, as defined by the World Health Organization, is pregnancy termination in which either the operator and/or the environment and technique of operation failed to meet the basic standard required for safety<sup>6,7</sup>. In Nigeria, the number of unsafe abortions carried out annually by women aged 15 to 44 years is in the region of 610,000<sup>8,9</sup>. The cost of managing complications from induced abortion is a major factor straining the meagre human, financial and material resources of many developing nations of Africa.

The proportion of abortions carried out by women aged 15 to 20 years is on the increase

especially in developing nations. In Nigeria many reports revealed that about 50% of induced abortion is carried out by women in this age group. It is also in this age group that majority of complications are seen<sup>1,3,4</sup>. It is estimated that preventing unwanted pregnancies would avert a total of 4.6 million Disability Adjusted Life Years (DALYS) apart from preventing another 100,000 maternal death occurring from induced abortion<sup>5</sup>. Amongst the immediate complications of induced abortions are (1) hemorrhage, (2) injuries to the genital tracts and bowel, (3) post-abortal sepsis, as well as Psychological trauma. Death usually results from

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**Table 1: Socio Demographic Characteristics of Patients With Induced Abortion**

	Range	No. of Patients	Percentage	Statistical Significance P Value
AGE DISTRIBUTION	15 – 19	28	32.56	
	20 – 24	35	40.70	
	25 – 29	14	16.28	
	30 – 34	4	4.10	
	35 – 39	4	4.60	
	≥ 40	1	1.17	
MARITAL STATUS	SINGLE	59	68.60	
	MARRIED	27	31.40	0.000008
PARITY	0	58	67.44	
	1 or more	28	32.56	0.000004
CONTRACEPTIVE PRACTICE	+ve	10	11.63	
	-ve	76	88.37	0.000001
PREVIOUS INDUCED ABORTION	+ve	28	32.56	
	-ve	58	67.44	0.000004
REASONS FOR PREGNANCY TERMINATION	SCHOOLING	8	9.30	
	NOT YET MARRIED	25	29.07	
	MALE PARTNER DENIED RESPONSIBILITY	6	6.98	
	TOO MANY CHILDREN	5	5.81	
	JOBLESS	4	4.62	
	NO REASON	38	44.19	

overwhelming Sepsis and heamorrhage, while many more millions suffer severe morbidity that places their future reproductive health in jeopardy<sup>3,6,9,10</sup>. This work was undertaken as a

follow-up to earlier studies and to observe if there are changes in the pattern of induced abortions in Ilorin ten years after the introduction of prevention of maternal mortality

**Table 2: Complications Encountered in Patients With Induced Abortions**

Types of Complications	No. of Patients	Percentage
Sepsis + Incomplete Abortion	35	40.70
Post-abortal heamorrhage	18	20.93
Lower genital tract trauma	14	16.28
Uterine Perforation	14	16.28
Bowel Injury	3	3.48
Pelvic Abscess	2	2.32
<b>Total</b>	<b>86</b>	<b>100</b>

project.

#### Materials and Methods

The case notes of all patients managed for complications from induced abortion at Ilorin University Teaching Hospitals between 1<sup>st</sup> January 1998 and 31<sup>st</sup> December 2001 were collected from the Records Department. The information extracted on demographic characteristics were age, marital status, parity and gestational age at termination, previous pregnancy termination and contraceptive history. Data was also collected on reasons for induced abortions and the types of complications as well as the treatment offered and the outcome. Finally, morbidity and mortality data was compared with previous works in this center to give the trend on induced abortion in this center. There were 103 cases, out of which 17 case notes had incomplete

information and were excluded from the study. Data were analysed in percentages and tests of significance carried out using Fisher's exact tests.

#### Results

During this five years period of review, the total Gynaecological admissions were 3145 including 103 cases of induced abortions, thus induced abortion constituted 3.26% of gynaecological admissions. There were 5 death giving a case totality of 6.10 percent. Table 1 showed the demographic characteristics of patient with complications from induced abortion. The age ranges from 15 to 40 years, and the mean age is 23 years (sd: 3.42). The age group 20-24 has the highest number of cases with 35 (40.7%), while age group 15-19 years recorded 28 (32.56) cases. Together, these two age groups accounted for 63 (73.05%) of complicated induced abortions. It was noted that teenagers presented for abortion at advance gestation. The age group 35 years and

**Table 3: Treatment Given to Patients With Induced Abortions**

Type of Treatment	No. of Patients	Percentage
Antiotics + Uterine evacuation	35	40.70
Antibiotic + Blood Transfusion	18	20.93
Antibiotic, EVA + Repair of laceration	14	16.28
Exploratory laparotomy		
Repair of Perforated Uteru only	14	16.28
Bowel Surfery + Repair of uterus	3	3.48
Drainage of absess	1	1.16
Colpotomy	1	1.16
<b>Total</b>	<b>86</b>	<b>100%</b>

**Table 4 Mortality / Morbidity / Trends / From Induced Abortion**

Previous and present works	Prevalence	Case Fatality	Proportion of Induced Abortion done by Teenager	Causes of death.
Adetoro 1989	0.21% of women in Rep. Age	4.2 / 1000	32.2%	Septicaemia and haemorrhage.
Anate 1998	7.6% of total abortion.	90.3/1000	53%	Septicaemia and haemorrhage.
Adeleke 2004	3.26% of Gynae administ.	61.0/1000	33%	Septicaemia and haemorrhage.

above accounted for only 5 (5.81%) of the cases. Majority 59 (69%) of the women were single, while 27 (31.40%) were married. The parity distribution showed that 58 (67.44%) were nulliparous and 28(32.56%) had one or more deliveries. Unmarried and nulliparous status tends to have significant correlation with effect in complications related to induced abortion ( $p < 0.05$ ). The contraceptive usage amongst the patient showed that 76(88.37%) were not using contraceptions while only 10 (11.63%) had use contraception at one time in the past. This was statistically significant P value  $< 0.05$ .

History of previous induced abortion from the patient showed that 28 (32.56%) had terminated frequency one or more times in the past and 58(67.44%) are doing so for the first time. The reasons why women carried out induced abortion were shown 25 (29.07%) terminated pregnancy because they are not married, 8 (9.30%) did so because they are still in school, 6 (6.98%) and 5(5.81%) carried out induced abortion because the male partner denied responsibility and that they already have too many children respectively. Table 2 showed different types of complications encountered. Thirty eight (44.19%) had incomplete abortion while 19 (22.10%) had post-abortal haemorrhage. Lower genital tract trauma and pelvic abscess collection were seen in 13 (15.12%) and 3 (3.49%) respectively. Uterine perforation and intestinal injury (both small large bowel) were seen in 13 (15.12%) and 5 (5.81%) cases respectively.

Table 3 showed the different types of treatment given. Antibiotic was universally administered. Broad-spectrum antibiotics consisting of

intravenous methonidazole and Ampicillin and Intramuscular Gentamicin initially, later modified based on the patient response and results of blood and endocarvicall swab culture and sensitivity pattern. In addition 35 (40.70) patients had uterine evacuation, 18 (20.93) had blood transfusion. 13 (15.12%) had examination under anaesthesia and repair of laceration. Exploratory laparotomy was done in 19 cases out of which 14 (73.68%) had repair of uterine perforation, 3 (15.79%) had bowel surgery and 1 (5.26%) had drainage of abscess. One patient (5.26%) had colpotomy.

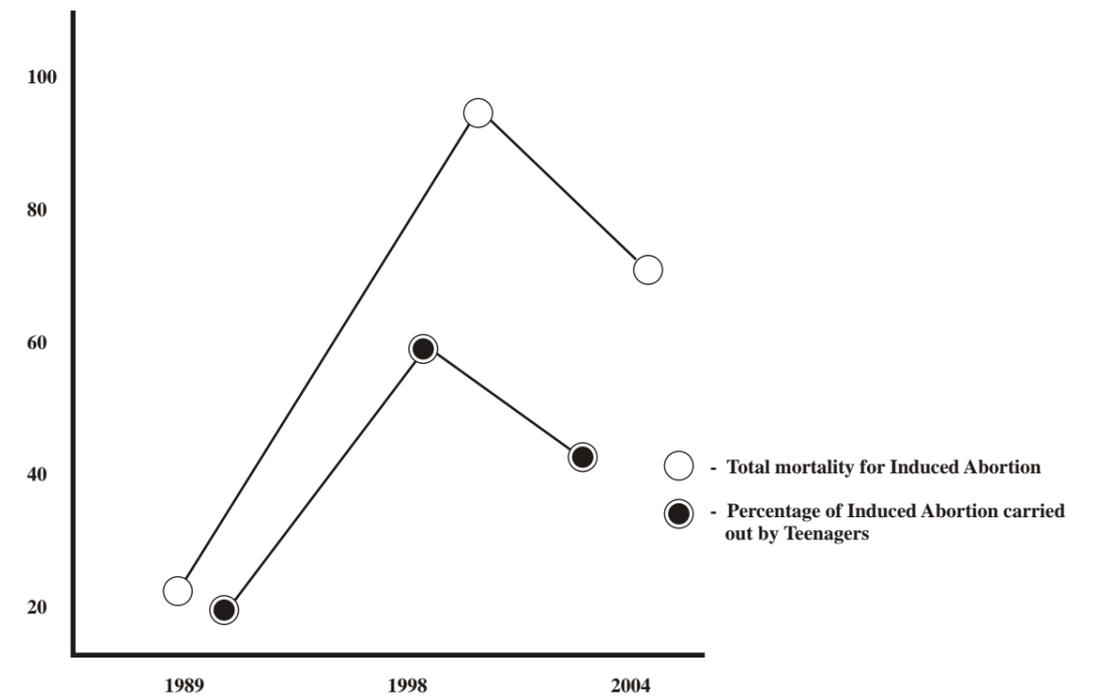
Table 4 and Figure 1 showed prevalence and Mortality pattern for induced abortion. In Ilorin in the last fourteen years. Teenagers accounted for 32.2% in 1989, this rose to 53% in 1998 but fell to 33% in 2001. Mortality rose from 4.2 per 1000 abortion in 1989 to 90.3 per 1000 in 1998 and 61.0 per 1000 in 2001. Heamorrhage and post-abortal sepsis continue to be the major causes of death in all the studies.

**Discussion**

Induced abortion remains an important gynaecological problem in developing countries, where it is a cause of unsafe-motherhood and a significant contributor to high level of maternal morbidity and mortality.<sup>11, 12</sup>. In this review the case fatality rate from induced abortion is 6.10 percent. Causes of death are haemorrhage and septicaemia. About one third of the patient had carried out induced abortion in the pasts, this is a serious danger to their reproductive health.

This is a retrospective study, negatively affected by inefficient hospital record keeping. However, cases with incomplete information were

Mortality / Pattern from Induced Abortion in Ilorin Figure I



excluded from the study. The study relates prevalence and mortality of induced abortion to that of earlier reports from the same center. Adetoro in 1989 reported case fatality rate of 0.42 percent, while Anate in 1998 reported 9.03 percent from the same centre. The low rate reported by Adetoro may be as a result of the dilutional effect from the denominator used (women in the reproductive age group) and a reflection of low hospital patronage of the time, while the 9.0 percent reported by Anate may be a true reflection of the situation. The figure of 6.1 percent in this report showed that there had been very little change despite Ilorin being one of the centers for prevention of maternal mortality project introduced about ten years ago. The causes of death are the same over these period these are post-abortal sepsis and haemorrhage.

From this review one third of women with complication from induced abortion are teenagers, while age 24 years and below accounted for three out of every four cases. Other authors reported similar findings.<sup>13,14</sup> This finding brings out the fact that these age groups are sexually active and contribute the greater percentage of single women that have never

used modern contraception. Majority of the women in this studies are nuliparous. These women jeopardize their much desired future reproductive potential and this can be a life time argony especially in our society that place high premium on children.

The study revealed that 90 percent of patient have never used modern contraception, while one third have carried out induced abortion in the past. This is a reflection of unmet need for contraception<sup>15</sup>. The prevalence of induced abortion was noted to fall as the contraceptive prevalence increases<sup>5,16</sup>. Therefore it is not supprissing that non-use of contraception was high amongst patient in this study.

About 30% of women resulted to induced abortion because they are not yet married, this is a reflection that our society has not yet accepted single parent as normal. Other reasons why women procured abortion are schooling, Joblessness, partner refuse responsibility and family completion. These finding suggest that, these pregnancies were unwanted and resulted mainly from non use of contraception. This corroborates an earlier report of low

contraceptive use in Ilorin. Aboyeji et al<sup>17</sup>. however, the fact that family planning services in Ilorin as in many parts of Nigeria. are not yet adolescent friendly<sup>19</sup>. May be a factor for low contraceptive use

Infections in various severity was present in all the patients. Other types of complications seen are incomplete abortion haemorrhage, genital tract trauma and uterine perforation as well as intestinal injury; other authors reported similar finding<sup>3,4,10</sup>. Different therapies were employed, based on the types of complications seen. However, the use of broad spectrum antibiotics was universal. In addition 44% had uterine re-evacuation. About 34% had exploratory laparotomy either for drainage of pelvic abscess, closure of uterine perforation and/or/repair of

Intestinal lujuries.

Case fatality for induced abortion has not changed significantly over the last fifteen years in Ilorin. There is need to redefine intervention strategies. More success would be achieved by improving the contraceptive use especially among single women in this environment. This can be achieved by making the Family Planning Services adolescent friendly. Society should begin to accept single parenthood, as doing so will remove an important reason why single women indulge in induced abortion, even when such women have economic power to raise a child.

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