

MORBIDITY AND MORTALITY DUE TO INDUCED ABORTIONS: A 5-YEAR REVIEW OF CASES IN A NIGERIAN TEACHING HOSPITAL

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ABSTRACT

Context: - There is evidence that doctors now perform a high proportion of induced abortions in Nigeria. There is therefore a need to assess the current status of morbidity from induced abortion

Aim: To determine the socio-demographic characteristics of patients with complications of induced abortions, type of complications and outcome of care.

Methods: all cases of complications of induced abortions admitted at the Wesley Guild Hospital, Ilesha Nigeria between January 2004 and December 2008 were the subjects of this study. The case notes of the patients were reviewed to obtain information on the socio demographic characteristics of the patients, contraceptive usage, type of complications, and the outcome of care.

Results: There were 1,048 gynaecological admissions during the study period with 84(8.0%) admitted for complications of induced abortions. The mean age of the patients was 23.0 years, 56.8% were single nulliparous women and 47.1% were students.

The gestational age at abortion ranged between 4 and 16 weeks with a mean of 9.9 weeks (SD=3.6). The abortion was carried out in private health institutions in 81.1% of cases. Retained product of conception(85.4 %) ,sepsis (55.4%) and haemorrhage (35.1%) were the most common complications. There were 3 maternal deaths, given a case fatality rate of 4.1%, and 13.

Conclusion: The pattern of complication of induced abortion has changed with a reduction in the proportion of patients with sepsis and the case fatality.

Key Words: Induced Abortions; Socio-demographic characteristics, complications, morbidity; mortality

INTRODUCTION

In Nigeria, as in many other developing countries, an induced abortion is illegal and is associated with socio-cultural and religious stigma. Under this restrictive legal and social climate, women faced with unwanted pregnancy often self-induce abortions or obtain clandestine abortion from different cadres of medical personnel and traditional healers under unsafe conditions.^{1,2}

Despite this restrictive abortion law, induced abortion is widely practiced in Nigeria. An estimated 25 per 1000 women of reproductive age group carry out illegal abortions annually in Nigeria.³ Many previous studies showed that the abortionist often used primitive methods which include herbal abortifacents and insertion of crude instruments into the uterus to procure abortions.^{4, 5} Many of these patients develop complications and constitute a major part of gynaecological admissions and a substantial proportion of the high maternal mortality and morbidity in Nigeria.^{4,6,7} At the Obafemi Awolowo University Teaching Hospital Ile-Ife,

Nigeria, between 1987 and 1996, complications from induced abortions was responsible for 25.8% of the maternal deaths.⁸

Recent studies in Nigeria have revealed that an increasing proportion of illegally induced abortion is now being done by medical doctors, compared with what obtained in the past decade when most cases were done by unqualified personnel.^{7,9} Two other events that is capable of affecting the prevalence of abortions complications in Nigeria are the wide availability of misoprostol and the increased use of vacuum aspiration kits by medical and paramedical

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personnel. There is therefore a need for a review of the current situation of induced abortions in Nigeria. The purpose of this study is to ascertain the current trend in patient characteristics, pattern of complication and outcome of care in cases admitted for complications of induced abortions in our hospital.

METHODS

All cases admitted for complications of induced abortions at Wesley Guild Hospital, Ilesha, Nigeria between January 2004 and December 2008 were the subject of this study. The hospital is a tertiary teaching hospital of Obafemi Awolowo University Ile-Ife, Nigeria.

The records of these patients were obtained from the gynaecological ward and theatre registers. The case notes were retrieved and reviewed to obtain information on the socio-demographic characteristics of the patients, contraceptive usage, type of complications, and the outcome of care. Data was analysed using SPSS Version 11.

In our hospital, and hence in this study, abortions refers to the termination of pregnancy before 28 weeks gestation.

RESULTS

There were 1,048 gynaecological admissions during the study period, out of which 84(8.0%) were admitted for complications of induced abortions. Ten cases notes could not be retrieved, the 74 patients whose case notes were found were the subjects of this study.

The mean age of the patients was 23.0years (SD=5.6) with a minimum age of 17 years and a maximum of 40 years. Majority (56.8%) were single nulliparous women. Of the 64 whose educational status were known, 54 (84.4%) had minimum of secondary school education. Almost half (47.1%) of the patients were students. Majority (84.4%) of those who were employed engaged in petty trading and low income jobs.

Fifty three (75.7%) patients have never used any form of contraceptive. Of those who had used contraceptives, condom(35.3%) was the most frequently used contraceptive followed by the pill (23.5%) and emergency contraceptives (23.5%). More than a third (35.5%) of the patients had a previous history of induced abortions.

The details of the socio-demographic characteristics of the patients are shown in table 1.

The mean gestational age of abortion was 9.9 weeks

(SD=65) with 55.7% of cases performed below 10 weeks gestation. The abortion was carried out in private health institution in 81.1% of cases, 8.1% of the patients self induced the abortion. Table 2 showed the details of gestational age, place of abortion and method used in terminating the pregnancies.

Retained product of conception(85.1%) was the most common complication. Only 13 (17.6%) patients presented within 72 hours of onset of complication.

There were 3 maternal deaths from complication of induced abortion during the study period given a case-fatality rate of 4.1% and constitute 13.6% of the total maternal deaths during this period. Two of the maternal deaths were from septicaemia and one died of tetanus.

DISCUSSION

STATEMENT OF THE PRINCIPAL FINDINGS

Complications of induced abortions still constitute a substantial proportion of our gynecological admissions, although the pattern of complication has changed with a reduction in the proportion of sepsis and case fatality compared to previous studies.

THE STRENGTHS AND WEAKNESSES OF THE STUDY DESIGN.

Although the limitation of hospital based data in the correct assessment of the magnitude of a problem in a general population is recognized, population based study is impracticable in countries like Nigeria, with restrictive abortion laws. Hence most reports on abortion in these countries are based on hospital data. Such data are however still useful in providing both research and clinical service priorities.

COMPARISON OF FINDINGS WITH THOSE OF OTHER STUDIES

This study showed that complications of induced abortion remain a substantial proportion of gynaecological admissions in our centre. However the current proportion of 8.0% is less than the 13.3% reported by Fasubaa at al¹⁰ from the same centre 10 years ago and much less than the 27-77% reported from earlier hospital based studies from similar centres in Nigeria.^{4, 6, 11} This may imply a reduced incidence of induced abortion in the community, probably in response to the national campaign against the spread of HIV/AIDS that promotes

abstinence and a wider use of condom in the community. It may also reflect a reduction in complications as a result of greater involvement of doctors in the provision of abortion services. In this study only 18.9% of the cases were performed outside the organized health care compared to 37.7% reported by Fasubaa *et al.*¹⁰ Many recent studies in Nigeria have confirmed that increasing proportion of illegal induced abortion are now performed by doctors compared with what obtains one or two decades ago.^{7,9,12}

The socio-demographic characteristics of the patients who are victims of the complications of induced abortions have not changed. In this study, as in other previous Nigerian studies,^{1, 4, 10, 13} young single adolescent students constitute the majority. It is however different from reported findings from Latin America and India^{14,15} and from a rural setting in Nigeria,¹² where majority of the patients were married women in the third decade of life. Various reasons have been given for the high incidence of illegal abortions among single adolescent students in our society. This include, desire not to interrupt their education, fear of parental disapproval and difficulty in securing husbands if they have children out of wedlock. These are legitimate fears in an African society with strong socio-cultural norms. Under this restrictive socio-cultural climate, the fear of continuing with an unwanted pregnancy far outweighs the risk of induced abortion. Besides, these young girls are unlikely to have enough funds to pay for the services of qualified personnel and are more likely to patronize quacks resulting in a high rate of complications.

In this series 24.3% of the patients gave a history of having ever used contraceptives. This is much higher than previous reports in Nigeria where less than 10% of patients who had illegal abortion had ever used contraceptives. Possible reasons for a better uptake of contraceptive in this series are the higher proportion of educated patients (more than 80% had at least secondary school education.) and the national campaign against the spread of HIV/AIDS which promote the use of condom.

Unlike in previous studies, there is a reduction in the proportion of patients with sepsis in this series. In two previous studies from this centre,^{1,10} over 90% of

the patients had sepsis as against 55.4% in the current study. Other centres in Nigeria have also reported high rates of sepsis among patients with illegal abortions.^{12,17} The relatively low rate of sepsis in the current study might be due to wider availability and use of very potent antibiotics by most private practitioners where most of the induced abortions were performed. It cannot be explained by early presentation as, in common with previous studies, majority (82.4%) of our patients presented later than 72 hours after the onset of complications.

The high incidence of retained product of conception and uterine perforation found in this study suggest that many of the abortionists lack appropriate skills. This is particularly worrying when viewed against the background that majority of the cases were performed in registered private hospitals and the recent reports that doctors now perform higher proportion of induced abortion in Nigeria. In a recent study from Enugu, Eastern Nigeria, Nwogu-Ikojo and Ezegwui¹⁷ reported that 54.5% of the procedures among patient that died were performed in private hospitals. Igberase and Ebeigbe¹² in Eku, South South Nigeria reported that 29.5% of the patients who had their abortions performed by doctors died. This information calls for an urgent need for adequate supervision of private health institutions in Nigeria and the training of health personnel in post abortion care so as to reduce morbidity and mortality from illegal abortions in Nigeria.

The case fatality of 4.1% found in this study is less than 9.5% reported earlier from this centre¹⁰ and much less than 20% or more reported in other centers in Nigeria and other developing countries.^{12,18} This is probably due to a reduction in the incidence of sepsis among our patients compared to previous reports as sepsis is responsible for the majority of deaths in this study and in other previous studies.^{10,12,15,17}

IMPLICATIONS OF THE STUDY FOR CLINICIANS SCIENTIST, POLICYMAKERS AND PATIENTS.

In countries like Nigeria, with restrictive abortion laws, there is a need for effective supervision of private health facilities and training of health care workers on post abortion care in order to reduce morbidity and mortality from induced abortion

TABLE 1.
Social demographic characteristics, and contraceptive utilization among patients with illegal induced abortions at Wesley Guild Hospital Ilesha, Nigeria 2004-2008.n(%)

PARAMETER	NO (%)
A. Age	
>20	21 (28.4)
20-24	34 (45.9)
>25	19 (25.7)
B. Parity	
PO	42 (56.8)
	30 (40.5)
>5	2 (2.7)
C. Education (n=64)	
Primary	9 (14.1)
Secondary	38(59.4)
Tertiary	16(25.0)
Nil	1(1.6)
D. Occupation (n=68)	
School Girls	32(47.1)
Petty Trader	23(33.8)
Artisans	6(8.8)
Civil Servants	4(5.9)
Others	3(4.4)
E. Contraceptives Utilization (n=70)	
Never Use	53(75.7)
Ever Use	17(24.3)
Condom	6(35.3)
Pill	4(23.5)
Emergency Contraception	4(23.5)
Injectable	2(11.8)
IUCD	1(5.9)

TABLE 11
Gestation age at abortion, place of termination, method of termination and interval between termination and presentation in hospitals.

PARAMETER	NO (%)
A. Gestational Age(weeks)(n=70)	
4-9	39(55.7)
10-12	11(15.7)
>12	20(28.6)
B. Place of Termination	
- Private Hospital/ Clinic	60(81.1)
- Chemist/Dispensary	6(8.1)
- Traditional Doctor	2(2.7)
- Self	6(8.1)
C. Method of Termination	
Instrument	60(81.1)
Oral Drugs	6(8.1)
Oral Herbs	4(5.4)
Injections	3(4.1)
Vaginal Herbs	1(1.4)
D. Termination Admission Interval (days)	
< 3	13 (17.6)
>25	(33.8)
>7	36(48.6)

TABLE THREE.
Complications of illegal induced abortions at Wesley Guild Hospital Ilesha, Nigeria 2004-2008.

COMPLICATION	NO (%)¹
Retained Product of Conception	63(85.14)
Sepsis	41(55.41)
Haemorrhage	26(35.14)
Uterine Perforation	4(5.41)
Tetanus	1(1.35)

¹ Some patients have more than one complications.

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