

Pathology of Abortion-Related Deaths in Port Harcourt Nigeria

Daye Seleye-Fubara¹, E. Nicholas Etebu¹ and John Ikimalo,²

Departments of ¹Anatomical Pathology and ²Obstetrics & Gynaecology, University of Port Harcourt Teaching Hospital, P.M.B. 6173, Port Harcourt. Nigeria

Abstract

Context: Abortions contribute significantly to the problem of maternal mortality and morbidity in Nigeria and it is desirable to identify the pathological events that culminate in mortality in these patients.

Objective: To describe autopsy features observed in patients who died from abortion and its complications in a tertiary health centre in Nigeria.

Study Design, Setting and Subjects: The data was obtained from an autopsy study of coroner's cases whose deaths occurred after abortions over a sixteen-year period. The antecedent clinical data were obtained from the patients' case notes.

Results: Of the 81 autopsies done following maternal deaths during the study period, 38 were abortion-related. The deaths followed 15 and 23 first and second trimester abortions respectively. Majority of the victims (68.3%) were aged between 15 and 29 years. The identified major causes of death were septic shock (50% of cases), haemorrhagic shock (26.3%), anaemic heart failure (13.2%) and peritonitis (10.5%). People with no formal health care training were responsible for procuring abortion in 57.9% of the cases.

Conclusion: Mortality from abortion is usually preceded by septic or haemorrhagic shock. Aggressive resuscitative measures may help to salvage some of the patients, but the social and economic factors driving the increasing rates of unsafe abortions in the society must be tackled to reduce abortion-related maternal mortality significantly.

Key Words: Abortion, Maternal Mortality, Autopsy. [Trop J Obstet Gynaecol, 2002, 19: 104-106]

Introduction

Abortion is the termination of pregnancy prior to 24 completed weeks of gestation. Over 200,000 women in the Third World die inadvertently every year due to botched abortion and millions more suffer severe morbidity, including infertility¹. The International Planned Parenthood Federation (IPPF) report of 1993 revealed that, 99% of the 500,000 maternal deaths from unsafe abortions were procured in developing countries².

Pregnancies are terminated for medical, social and eugenic reasons throughout the world. The World Health Organisation (WHO) in 1990 estimated that 40-60 million abortions occurred around the world annually. Half of these were performed outside authorised health services or by unauthorised and unskilled abortionists³. Adolescent childbearing is a social norm usually expected after marriage in this environment but sexual intercourse is generally initiated before marriage in many contemporary societies⁴ and there has been an increase in the number of sexual partners among unmarried adolescents migrating to the cities who are unemployed. Majority of such pregnancies are unintended and are usually unwanted, leading to the possibility of intentional termination. Therapeutic induced abortion usually results from pregnancies

incurred from rape, fetal abnormality and endangered maternal life⁵.

In Nigeria, unsafe abortion is responsible for about 20,000 deaths annually⁶ and this accounted for between 27 and 77% of all gynaecological hospital-admissions⁷. Induced abortion is illegal in Nigeria except when procured to save the mother's life⁸. This restrictive abortion law has not stopped the practice but has merely driven the practice underground to quacks, making it dangerous and unsafe⁹.

This study is aimed at determining the causes of abortion-related death based on autopsies performed at the University of Port-Harcourt Teaching Hospital (UPTH) over a 16-year period. This should help to bring into focus the ills of abortion and to suggest ways of preventing these maternal deaths.

Materials and Methods

A review of all the coroner's autopsy request forms received in the Anatomical Pathology Department of UPTH from January 1986 to December 2001 for abortion-related deaths was done.

Correspondence: Dr D. Seleye-Fubara, Department of Anatomical Pathology, University of Port-Harcourt Teaching Hospital, P.M.B. 6173, Port Harcourt, Rivers State, Nigeria.

Data pertaining to age, anatomical cause of death, occupation of the victims, gestational age at termination and the place the abortion was procured were extracted for analysis from the patient's clinical and autopsy records.

Results

Abortion related deaths autopsied in UPTH accounted for 47% of all autopsied maternal deaths during the study period. The age distribution of the patients is shown in Table 1. More than 50% of the patients were below the age of 25 years. Most of the abortions occurred in the second trimester of pregnancy. The occupational groups of the victims included: students 9(23.7%), applicants 8(21%), domestic helps 7(18.4%), housewives 6(15.9%). Civil servants and traders had 4 (10.5%) each.

Table 1

Age Distribution of the Abortion Cases

Age (years)	First Trimester	Second Trimester	Total (%)
< 14	1	2	3 (8)
15-19	2	6	8 (21)
20-24	7	4	11 (28.9)
25-29	2	5	7 (18.4)
30-34	1	3	4 (10.5)
35-39	2	1	3 (7.9)
40 above	-	2	2 (5.3)
TOTAL	15 (39.5%)	23 (60.5%)	38 (100)

Shock from septicaemia or excessive blood loss was responsible for more than three-quarters of all the deaths as shown in Table 2.

An analysis of the personnel responsible for terminating the pregnancies revealed that only one was done by skilled medical personnel, 3 (7.9%) by junior inexperienced doctors, 5 (15.2%) by medical students, 7 (18.4%) by nurses, 15 (39.7%) by patent medicine vendors and the remaining 7 (18.4%) by traditional birth attendants.

Discussion

Induced abortion is an important gynaecological problem which contributes significantly to maternal mortality in Nigeria ¹⁰. It is mainly procured for unwanted pregnancies such as in adolescent girls or in cases of marital infidelity that may cause scandal and instability of marriage ¹. It is therefore not surprising that abortion-related deaths are

commoner in the age group 15-29 years with a median at about 22 years in this study. This age is slightly higher to that recorded in a 1993 study ¹⁰ where the peak was at age 19 years. In this age group, most of the victims are students and unemployed youth who do not have any means of livelihood but depend on the meagre allowances received from their partners. The female youth serving as domestic servants usually fell prey to the seduction of their employer or his male children, making abortions inevitable to avoid scandal and embarrassment ¹⁰.

Unqualified, inexperienced and unskilled abortionists, usually in unhygienic settings, procured most of these abortions in the second trimester of gestation. A common consequence is the occurrence of serious life-threatening infections. The reasons for waiting till the second trimester before going for an abortion included the inability to pay for abortion services, inexperience in recognizing pregnancy and ignorance concerning the source of help and advice, failed attempts by using pregnancy as a bait for getting married to their boy friends or for winning parents' sympathy ¹¹. Nursing mothers with tender aged babies who were pregnant, though their husbands are responsible for the pregnancy, opted for abortion to avoid social embarrassment. Married women also procured illegal abortion due to economic hardship and an attempt at reducing the family size. Those who were pregnant from their extra marital activities also opted for abortion to preserve their marriage and avoid scandal.

Table 2

Anatomical Causes of Death in Abortion-Related Maternal Deaths

Autopsy-Determined Cause of Death	Number	%
<i>Septic/Endotoxic Shock</i>	19	50.0
<i>Haemorrhage / Shock</i>	10	26.3
<i>Anaemic Heart Failure</i>	5	13.2
<i>Uterine Perforation / Peritonitis</i>	4	10.5
Grand Total	38	100

All manner of instruments have been used, from surgical dilators to bicycles spokes. A favourite instrument used by the paramedical (nurses and auxiliaries) abortionists is the bougie or stiff catheters ¹². The inexperienced hands usually pushed the instrument into the posterior fornix, puncturing the peritoneum. Majority of the victims

of clandestine abortions end up with complications such as genital sepsis, severe haemorrhage leading to shock, anaemia with heart failure, uterine perforation, peritonitis and septicaemia as well as vesico-vaginal fistula¹¹. In this study, most of the deaths resulted from septicaemic and haemorrhagic shock. Thus, some lives can be saved if doctors and nurses are adequately trained and provided with the resources to combat cardiovascular collapse in these patients. Ultimately, social measures have to be adopted to prevent the pregnancies that are likely to be terminated

The following may help to reduce the carnage from unsafe abortions in Nigeria if instituted and strictly followed:

- Prevention of unwanted pregnancies using the available contraceptive measures and provision of post abortal care services in Nigeria free of charge.
- Instituting abortion training in medical school programme and update doctors on abortion procedures and management of complications.
- Liberalisation of abortion laws because most developed countries that have liberalised abortion laws now have fewer abortion-related maternal deaths.

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