

POST-INDUCED ABORTION MORBIDITY AND MORTALITY IN OLEH, NIGERIA

*V.O. Awusi, **V. Okeleke

*Department of Family Medicine, Faculty of Medical Sciences, Delta State University, Abraka, Delta State, Nigeria

**Central Hospital, Oleh, Isoko South Local Government Area of Delta State, Nigeria.

Correspondence address:

Dr V.O. Awusi
Department of Family Medicine
Faculty of Medical Sciences, Delta State University,
Abraka, Delta State, Nigeria
Email:

ABSTRACT

The aim of this retrospective study was to determine the maternal morbidity and mortality among 87 patient treated at the Central Hospital, Oleh, Delta State, Nigeria, for complications of induced abortion from January 1st 2004 to December 31st 2008.

The total number of maternal admissions and deaths, over the period, were, respectively, 3,680 and 34(8 from induced abortion). Induced abortion accounted for 2.4% and 23.5%, respectively, of the total maternal morbidity (admissions) and mortality. The mean age of the patients was 20.4±5.6years (range of 15 . 36years). Majority were, in age group 15 . 19years (71.2%), students/young school leavers (85.1%), unmarried (82.8%), unemployed (89.7%) and had had second trimester abortion (64.4%). It is significant that of those who had second trimester abortion, 66.1% were teenagers. Most (94.3%) of the patients presented with multiple complications which included genital sepsis (94.3%), retained products of conception (90.8%), anaemia (17.2%), pelvic infection with peritonitis (17.2%) and abscess formation (15%), uterine (3.5%) and intestinal (2.3%) perforations. The commonest cause of

death (n = 8) was generalised septicaemia (37.5%).

Policy makers and health managers should formulate initiatives to prevent unwanted pregnancy including health education/contraceptive utilization and provision of safe abortion services.

Keywords: abortion, induced, maternal, morbidity, mortality, law.

INTRODUCTION

Induced abortion as a means of terminating pregnancy for medical, social and eugenic reasons is practised in many societies¹. In Nigeria, Clinicians are often faced by patients requiring immediate and sympathetic help in procuring induced abortion because the pregnancy was %unwanted+ at the time. In spite of this, abortion law in Nigeria is still restrictive², hence abortions are clandestinely and illegally undertaken everyday by those least qualified to do so^{3,4} and in substandard medical environment⁴ resulting in unsafe abortion which has been reported⁵ to cause about 20,000 deaths a year in Nigeria. Besides the mortality associated with their practice⁵, the immediate and long-term morbidity is enormous and accounts for a significant component of a hospital's workload^{6,7}.

The study, therefore, was conducted to highlight the continuing association of clandestine induced abortion with maternal morbidity and mortality in our environment. This may with facilitate the development of policies to correct this scenario.

MATERIALS AND METHODS

This was a retrospective study carried out in Central Hospital, Odeh, Isoko South Local Government Area (L.G.A.) of Delta State, Nigeria, which serves as the district referral centre for the whole of Isoko L.G.A. (North and South) and its neighbouring communities. The case-file of 87 patients who were admitted and treated for complications of induced abortion, between January 1st 2004 and December 31st 2008, were retrieved from the medical records library and reviewed.

Information retrieved from the case note included relevant socio-demographic data and clinical information which included the method used in procuring the abortion, gestational age the termination occurred, practitioners status and the associated morbidities.

A data base was generated with the information and analysed manually. Analysis was done to compare mean values and frequencies/percentages, and the students t-test for association between the variables where appropriate.

RESULTS

During the period under review, there were a total of 3,680 maternal admissions. Out of the 573 cases of abortion during the study period, 87 cases were induced making the prevalence of induced abortion 15.2%. There were 8 deaths recorded among the cases of induced abortion giving a fatality rate of 23.5% for induced abortion

During the same period, there were a total of 34 maternal deaths in the hospital. Induced abortion accounted for 23.5% of all the maternal deaths and 2.4% of the total maternal admissions. The contribution of induced abortion to both the total maternal deaths and admissions is significant ($P < 0.05$).

The mean age of the patients was 20.4 ± 5.6 years (15.36 years). Majority were, secondary school students/leavers (85.1%), unmarried (82.8%) and unemployed (89.7%). **Table 1** shows the age distribution, educational levels of the patients and gestational age at termination. Most were in the age group 15 - 19 years (71.2%) and had had 2nd trimester abortion (64.4%) out of which those in the age group of 15 - 19 years (teenagers) constituted 42.5%. Only 35.6% of the patients had 1st trimester abortion. **Table 2** shows the various complications the patients presented with. Majority (94.3%) had multiple morbidities. Genital sepsis was the most frequent complication (94.3%) found in all except five patients with incomplete abortion. Others were retained products of conception (90.8%), peritonitis (17.2%), anaemia (17.2%), pelvic abscess (15.0%), septicaemia (11.5%), cervical laceration (5.8%), uterine (3.5%) and intestinal (2.3%) perforations. Eight died (9.2%).

The major complications associated with maternal deaths were generalised septicaemia (37.5%), jaundice (25%), anaemia (12.5%), peritonitis (12.5%) and uterine perforation (12.5%) as shown in Table 3.

In addition to the definitive treatment given, all the patients received appropriate antibiotic therapy; 38 (43.7%) received blood transfusion, ranging from 1 - 6 units (average 2) of whole blood.

Table 1: Age distribution, educational level and gestational age at termination

Variable	Frequency	Percentage
Age groups		
15 . 19	62	71.2
20 . 24	13	15.0
25 . 29	7	8.0
30 . 34	2	2.3
> 34	3	3.5
Total	87	100
Level of education		
None	0	0.0
Primary	5	5.7
Secondary	74	85.1
Tertiary	8	9.2
Trimester at Termination of pregnancy		
First trimester	31	35.6
Second trimester	56	64.4

Table 2: Complications associated with induced abortion

Complications	No. of patients (%)
Genital sepsis	82 (94.3)
Retained products of conception	79 (90.8)
Peritonitis	15 (17.2)
Anaemia	15 (17.2)
Pelvic abscess	13 (15.0)
Septicaemia	10 (11.5)
Cervical laceration	5 (5.8)
Uterine perforation	3 (3.5)
Intestinal perforation	2 (2.3)
Death	8 (9.2)

Table 3: Complications associated with maternal death

Causes	No. of patients (%)
Generalized septicaemia	3 (37.5)
Sepsis with jaundice	2 (25.0)
Sepsis with anaemia	1 (12.5)
Peritonitis	1 (12.5)
Uterine perforation with peritonitis	1 (12.5)
Total	8 (100)

Discussion

This study report that induced abortion contributed significantly to the maternal morbidity (2.4%) and mortality (23.5%) of the women who attended Central Hospital, Oleh, Delta State of Nigeria, from January 1st 2004 to December 31st 2008. The results of this study is similar to published data¹ that induced abortion with its attendant sequelae is increasing in many developing countries, as also in other studies which reported maternal morbidity of 2.3% (Eku, Nigeria)⁸, 1.3% (Newi, Nigeria)³, 0.4% (Nakuru, Kenya)⁹ and mortality rates of 22.6%⁸, 21.1%³ and 25%⁹ following induced abortion. The above post-induced abortion maternal mortality rates, from developing countries, are far higher than the rates reported from developed countries such as United Kingdom . 4.7%¹⁰ and United States of America . less than 1%¹¹ . This may be due to the latter's better health-care services/health-seeking behaviour and provision of safe/legal abortion services.

The restrictive abortion law in most developing countries is a contributory factor to these post-abortion negative maternal health indices, as the law has prevented the institutionalization of safe abortion practices¹², and has

continued to pave way for thriving backdoor and lay abortionists^{2,6} who lack the necessary skills and operates in an environment lacking the minimum medical standards⁴.

As in other studies^{13,14}, majority of our patients who had undergone induced abortion were teenagers and presented themselves for abortion when the pregnancy was advanced and, therefore requiring relatively more complicated termination procedure which only a specialist may handle. But, either because of their health-seeking behaviour, socio-economic, cultural disapproval of pre-marital sex and/or legal restriction reasons, these women hide their pregnancy and resort to unskilled providers, use dangerous methods and most times, delay in seeking help after complication(s) develop; and only seek help when they become seriously ill^{3,7}.

This explains the high incidence of serious complications such as anaemia and infectious morbidities . genital sepsis/ septicaemia/ peritonitis/ pelvic abscess . seen in this study; necessitating various modalities of definitive treatment. In this study, non-medically qualified practitioners working in substandard medical environment carried out most (85%) of the attempted abortions which is similar to findings from other studies^{3,5}. Some of the immediate complications of unsafe abortion that are life-threatening are haemorrhage and infectious morbidities such as septicaemia¹². It was therefore; not surprising that the major cause of death, in this series, was generalised septicaemia (37.5%) and infection also played some role in the cause of death in the other patients; while 12.5% of the patients died from anaemia-related causes.

The finding in this study, associating young, unemployed and

unmarried women who are students/recent school leavers with unwanted pregnancy and induced abortion provides direction for strategies for the prevention of the complications of induced abortion, viz : health education including positive health-seeking behaviour and contraceptive utilization should be optimised among all women (and men), but in particular among adolescents who have been reported to be at risk of unwanted pregnancy^{4,13,14}. However, low contraceptive uptake among unmarried girls and separated couples has been reported in Nigeria⁴ and other developing countries¹³. This has been attributed to their attitude of wanting to keep sexual activity secret; therefore most sexually active women do not use contraceptive, with the attendant risk of unwanted pregnancy, consequent induced abortion and its health consequences as shown in this study and others^{5,7,9}.

Finally, this study demonstrate that induced abortion is still a major cause of maternal morbidity and mortality in Nigeria as has been reported previously other studies^{2,3,6,7}. Legislation alone may not effectively control induced unsafe abortion and its sequelae until alternatives are provided. Some of these alternatives include mass literacy campaign on the dangers of induced abortion, family-life education, provision of family planning services to all women and men without discrimination and liberalization of abortion laws which has been shown¹² to markedly reduce abortion-related maternal morbidity and mortality by enabling the provision of safe/legal abortion services. The issue is not whether to legalize abortion or not, but rather the merit between safe abortion made legally available and one obtained clandestinely and illegally

under unsafe conditions with its untoward medical consequences.

ACKNOWLEDGEMENT

We wish to thank the staff of the medical records department of Central Hospital, Oleh, for their immense assistance during the study period.

REFERENCES

1. World Health Organisation (WHO). Unsafe abortion. Global and Regional Estimates of Unsafe Abortion and Associated Mortality in 2000. 4th edn. Geneva: WHO, 2004.
2. Okonofua FE. Unwanted pregnancy, unsafe abortion and the law in Nigeria. *Trop. J. Obstets. Gynaecol* 2002; 19: 515-17.
3. Ikechebelu JI, Okoli CC. Mortality and morbidity following induced abortion in Nnewi, Nigeria. *Trop. Doct.* 2003; 33: 170- 2.
4. Olukoya AA, Kaya A, Ferguson BJ, Abou-Zahr C. Unsafe abortion in adolescents. *Int. J. Gynaecol. Obstets.* 2001; 75: 137-47.
5. Raufu A. Unsafe abortions cause 20,000 deaths a year in Nigeria. *BMJ* 2002; 325: 988.
6. Ntia IO, Ekele BA. Bowel prolapse through perforated uterus following induced abortion. *West Afr. J. Med.* 2002; 19: 209-11.
7. Oladapo OT, Coker AA. Bowel prolapse and gangrene following vaginal vault perforation: an example of the menace of criminal abortion in Nigeria. *Trop. Doct.* 2005; 35: 177-8.
8. Igberase GO, Ebeigbe PN. Exploring the pattern of complications of induced abortion in a rural mission tertiary hospital in Niger-Delta, Nigeria. *Nig. J. Med.* 2008; 16(2): 129-32.
9. Osiemo, R. Unsafe abortion in Kenya. *Trop. Doct.* 2005; 35: 159-160
10. Why mothers die: 2000 . 2002. Confidential Enquiry into Maternal and Child Health. The sixth Report. London: RCOG Press, 2004.
11. Stauss LT, Herndon J, Chang J. Abortion Surveillance . United States 2001. *MMWR surv cell summ.* 2004; 53:1-32.
12. Vanessa, S. Safe abortion: a woman's right. *Trop. Doct.* 2005; 35: 130-33.
13. Lema VM, Mpanga V, Makanani BS. Socio-demographic characteristics of adolescent post-abortion patients in Blantyre, Malawi. *East Afr. Med. J.* 2002; 79: 306-10.
14. Adanu RMK, Ntumy MN, Tweneboah E. Profile of women with abortion complications in Ghana. *Trop. Doct.* 2005; 35: 138-41.