# Pattern of Complicated Unsafe Abortions in Niger Delta University Teaching Hospital Okolobiri, Nigeria: A 4 Year Review.

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Isa Ayuba Ibrahim, Israel Jeremiah, Isaac J Abasi, Abednego O Addah

Department of Obstetrics and Gynaecology, Niger Delta University Teaching Hospital, Okolobiri, Nigeria.

# **ABSTRACT**

**Background:** Abortions performed by persons lacking the requisite skills or in environments lacking minimal medical standards or both are considered unsafe. It is estimated that over 20 million unsafe abortions are performed annually and about 70,000 women die globally as a result, with majority occurring in the developing world. This study aims to determine the pattern of complicated unsafe abortions in Niger delta University Teaching Hospital (NDUTH) Okolobiri.

**Methods:** The study is a four-year retrospective analysis of cases of complicated unsafe abortion managed at the Niger Delta University Teaching Hospital Okolobiri, Bayelsa state.

**Results**: The prevalence of complicated unsafe abortion during the study period was 4.1% of all deliveries and 14.0% of all gynaecological admissions. Majority (55.6%) of the patients had secondary education, while 31.8% were teenagers. Two thirds had a history of previous termination of pregnancy and 87.3% of the patients had never used any form of modern contraceptive. 'Quacks' accounted for 47.6% of the abortions and 53.9% of the abortions were performed late in the first trimester. Genital sepsis, retained products of conception, pelvic abscess and septicaemia were the most frequent complications occurring in 88.9%, 82.5%, 22.2% and 19.1% respectively. Surgical management was employed in 87.3% of the patients. The case fatality ratio was 4.8%, contributing 17.6% of all maternal deaths during the study period. The commonest cause of death was septicaemia (66.7%).

**Conclusion:** There is a high prevalence of unsafe abortions in our environment. It continues to be a major contributor to maternal morbidity and mortality in the Niger Delta. Most of its victims are single adolescent school girls. Efforts directed at reducing unintended pregnancy by comprehensive family planning programs and effective post abortal care services will reduce the problem.

**Keywords:** Unsafe abortion, morbidities, outcome.

Correspondence: Dr. Israel Jeremiah

### INTRODUCTION

Unsafe abortion is a persistent, but preventable pandemic with grave implications on the life of women and their reproductive career<sup>1,2</sup>. It is defined by the World Health Organization (W.H.O) as a procedure for terminating an unwanted pregnancy, either by a person lacking the necessary skill or in an environment lacking the minimum standard or both<sup>2</sup>. It is one of the five leading causes of maternal mortality world wide. Out of the over half a million maternal deaths that occur each year globally<sup>2,3</sup>, it is estimated that one quarter to one third may be a consequence of complications arising from unsafe abortion.<sup>1,4,5</sup>

It is estimated that about 210 million pregnancies occur each year, nearly half of these pregnancies are unplanned and a greater definitely unwanted <sup>2,3,6</sup>. With such a large proportion of unplanned and unwanted pregnancies it is not surprising that everyday some 150,000 women undergo induced abortions<sup>2</sup>. Unfortunately, for a variety of reasons, a third of this women end up in a clandestine or otherwise unsafe abortion 'clinics' or in the hands of illegal practitioners<sup>5</sup>.

Reliable data on the incidence of unsafe abortion are generally lacking, especially in countries like Nigeria where access to abortion is legally restricted. Whether legal or illegal, induced abortion is generally stigmatized and frequently censured by political, religious or other leaders. Hence, under-reporting is routine even in countries where abortion is legally available upon request<sup>7,8</sup>.

Unsafe abortion is most often associated with attendant complications of sepsis, hemorrhage requiring blood transfusion, uterine and bowel perforation, pelvic abscess, endotoxic shock, renal failure and death. Long term sequalae include ectopic pregnancy, chronic pelvic pain and infertility with grave implications for future reproductive health of the woman<sup>2</sup>.

What is particularly worrisome about the scenario of unsafe abortion is that these deaths or disabilities are occurring in spite of the fact that the world has safe, effective and affordable means of preventing unwanted pregnancy<sup>1,2</sup>. Moreover, there also exist safe and effective means (both surgical and medical) of inducing abortion<sup>4,5</sup>.

This descriptive study therefore sought to determine the pattern of complicated unsafe abortions in Niger delta University Teaching Hospital (NDUTH) Okolobiri, in areas of epidemiology, clinical features and management outcome in order to proffer measures that can help curtail this scourge of unsafe abortions.

## **METHOD**

The study is a four year retrospective review of all cases of unsafe abortion managed at Niger Delta University Teaching Hospital (NDUTH) Okolobiri, a tertiary hospital in Bayelsa State, from January 1, 2007 to December 31, 2010. The sources of information were gynaecological and labour ward records, theatre records, patient's records and case notes. The total deliveries, maternal deaths and number gynaecological admissions during the period of review were also obtained. Information was collected on their socio demographic characteristics, methods used, pattern of clinical presentation and outcome were obtained.

Data collected was entered into a spread sheet using SPSS 15.0 for Windows® statistical software which was also used for analysis. Results are presented as means with standard deviations, rates and proportions in tables and figures.

The patients had comprehensive post abortion care, including emergency treatment of incomplete abortion and potentially life-threatening complications, post- abortion family planning counseling and services as well as providing other reproductive health services.

#### **RESULTS**

In the 4-year period of study, there were four hundred and fourty-nine (449) gynaecological admissions and the total deliveries were one thousand five hundred and fourty. (1,540). during this same period, there were sixty three unsafe abortions giving an incidence of 4.1% of total deliveries and 14.0% of total gynaecological admissions.

Figure 1 shows the annual trend of the incidence of unsafe abortions (expressed as a percentage of total deliveries). The incidence was 11.6% in 2007 and steadily declined to 2.3% in

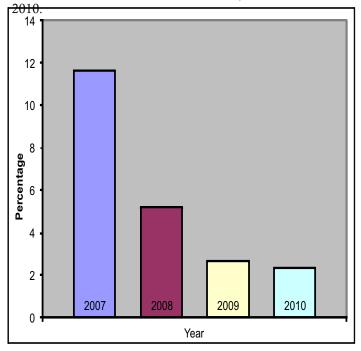


Figure 1. Annual trend in the prevalence of unsafe abortion.

**Table 1** shows the sociodemographic characteristics of the patients presenting with the complications of unsafe abortion.

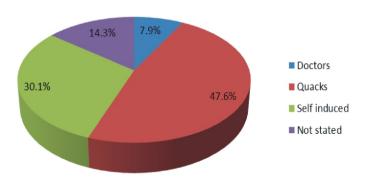
Table 1: Socio-demographic characteristics of the patients.

Parameters	Number	Percentage
Age (years)		
d19	20	31.8
20-29	33	52.4
30-39	7	11.1
e40	3	4.8
Parity		
0	35	55.5
1 4	24	38.1
e5	4	6.4
Educational status		
Nil	3	4.8
Primary education	5	7.9
Secondary education	35	55.6
Undergraduates	11	17.5
Graduates	9	14.3
Total	63	100

Teenagers comprised 31.8% of the patients, while 55.5% were nulliparous. More than half (55.6%) had secondary education. Majority (87.3%) of the patients had never used any form of modern contraceptive methods while 4.8% had failed contraceptive. Two thirds (66.7%) of the patients had terminated at least one pregnancy in the past.

Most (69.8%) of the unsafe abortions were late abortions (late first trimester or second trimester), only 20.6% were performed early. Figure 2 shows that only 7.9% of the abortions were performed by doctors while 47.6% were performed by quacks

Figure 2: Status of abortion provider.



**Table 2** shows that in 46% of patients had dilatation and curettage while 12.7% had other forms of vaginal instrumentation.

TABLE 2: METHOD OF TERMINATION OF PREGNANCY

Methods of termin ation	Number	Percentage
Medication alone (oxytocin, ergometrine, purgative saline,		
alcohol etc)	7	11.1
Local Herbs in the vagina	12	19.1
Medication and instrumentation	4	6.3
Dilatation and curettage (D&C)	29	46.0
Other forms of i nstrumentation alone ( Knitting needles,	8	12.7
hangers etc.)		
Not stated	3	4.8
Total	63	100

and 30.1% were self induced. In 14.3%, there was no documentation on the place of termination.

Most of the patients (73%) presented after one week following

the procurement of abortion. Only 12.7% presented within one week of the procedure.

**Table 3**, shows that genital sepsis, retained products of conception, pelvic abscess and septicaemia constitute the most frequent complications seen in this study occurring in 88.9%,

**TABLE 3: MORBIDITIES AMONG THE PATIENTS** 

Complication	Number	Percentage
Genital sepsis	59	88.9
Retained products of conception	52	82.5
Pelvic abscess	14	22.2
Septicaemia	12	19.0
Perforated uterus	4	6.3
Haemorrhagic stock	4	6.3
Gangrenous uterus	3	4.8
Acute renal failure	3	4.8
Perforated intestinal	2	3.2
Bladd er injury	1	1.6
Tetanus	1	1.6

82.5%, 22.2% and 19.0% respectively. Tetanus and bladder injury occurred in 1.6% respectively.

Majority (87.3%) had both medical and surgical management. While 12.7% of the patients were treated with antibiotics alone. Of those who had surgical management, 82.9% had evacuation of retained products of conception alone, 22.2% had exploratory laparotomy with drainage of pelvic collection; 6.3% had repair of uterine perforation, 4.8% had hysterectomy, 3.2% had bowel repair (of perforation) and 1.58 had repair of bladder injury.

Three patients (4.8%) that presented with complications of unsafe abortion during the study period died giving abortion case fatality rate of 256/100,000. Two women (66.7%) died of septicaemia and one died of acute renal failure (33.3%). During this same period, there were 17 maternal deaths in the hospital; therefore, induced abortions were responsible for 17.6% of all maternal deaths.

The duration of hospital stay ranged from 3 days to 62 days with a mean of 14.4 days. While 40.6% were discharged home within one week, majority (59.4%) were discharged home after one week.

#### DISCUSSION

This review reveals that patients admitted on account of complications from unsafe abortion constituted a considerable proportion of gynaecological admissions (14.%) at Niger Delta University Teaching Hospital Okolobiri during the study period. This is lower than (27.6%) reported in Calabar9 but higher than the (5.6%) repoted in Eku10 (both in the Niger Delta). The true incidence of illegal abortion in any community is speculative1,4. This is because the majority of induced abortions are done privately and when complications arise, they are treated outside the government health institutions and, therefore, not documented. 11,12.

The age distribution of our patients ranges from 12 to 44 years, with the under 20 years constituting the majority of the patients (38.1%). This finding agrees with the other studies where majority of women presenting with complications of unsafe abortions were single, nulliparous, adolescent students.5,13-15.

The high prevalence might be as a result of ignorance of a

teenager who gets involved in sexual activity without taking preventive measures. Some indulge in sex for purpose of gratification or as a result of peer pressure15,16,17. Also single women who seek contraceptive services face the obstacle of social and cultural restriction as well as poor access to contraceptive services which makes it difficult for them to obtain effective contraception18,19. Only 7.9% of patients in this study had ever used any modern method of contraception. Evidence suggests that educated women generally have access to safe abortion services no matter the legality, while it is the poor uneducated that resort to unsafe illegal abortion20. In this study, majority of the patients were educated, however, poverty and poor access to contraceptive services may have been contributory to their having unsafe abortion.

More than half of our patients gave history of at least one previous termination of pregnancy. This finding is not surprising because of the low prevalence of contraceptive usage in our communities 20 leading to unwanted pregnancies since sexual activities among the adolescents are rampant and on the increase 18.

For many girls the risk associated with abortions are outweighed by the fears generated from an unplanned pregnancy; fears of parental disapproval, abandonment by a boyfriend or husband, financial and emotional responsibilities of childbearing, expulsion from school or inability to secure husbands if they have a child out of wedlock21,22. There is also the fear of future infertility resulting from adverse effects of modern contraceptive methods23,24. The above reasons have prompted many adolescents to seek for abortion, but sadly obtaining a safe abortion is not easy for adolescents who may encounter medical, cultural and legal barriers, as obtains in Nigeria21.

Majority of the abortions were carried out after 9 weeks of gestation as these adolescents do not seek care early when the associated risks are minimal either because they are not aware that they are pregnant, unwillingness to accept the situation, lack of knowledge of where to seek help or lack of economic resources 15.21.

Information about the abortionist is often withheld and this encourages the proliferation of unskilled practitioners. Majority of identified abortionist by this study and others before it were quacks incompetent and perhaps non medical persons6. While 14.3% of patients withheld information about the abortionist, 47.6% of the abortions in this study were performed by non doctors.

Although the complications that follow unsafe abortion are often multiple, genital sepsis was the most frequent complication seen in this study as documented in other studies2,9,10. Other common complications were retained product of conception (82.5%), pelvic collection (22.2%) and perforated uterus (6.3%). The high rate of sepsis is probably due to the introduction of unsterile instruments into the uterine cavity, late presentation and majority of illegal abortion are commonly performed under unhygienic conditions and consequently carry the risks of infection. Because of the severity of the complications associated with unsafe abortion, prolonged hospital stay was common in this study with resultant strain on scarce healthcare resources.

Majority of our patients presented late. This is because induced abortion is illegal and usually performed secretly, patients who develop complications tend to present late when severely ill or in a moribund state 15.

While majority of patients were managed by combination of surgical and medical methods, only 12.7% of the patients were managed with medication alone. Apparently this is because surgical complications are bound to be high because majority of the termination were done by quacks who often leave products of conception behind and sometimes perforate the uterus. The operative procedures performed ranged from evacuation of retained products of conception, drainage of pelvic collection to repair of perforated uterus. Three patients had a hysterectomy which effectively ended their reproductive careers.

In this study, 3 maternal deaths were recorded giving a case fatality ratio of 4.8%. This constituted 17.6% of maternal deaths during the period of study. Septicaemia was the commonest cause of death. This is similar to the findings in other studies 15.

Whereas there appeared to be a steady decline in the annual prevalence rates of patients treated for complications of unsafe abortions in our hospital, more needs to be done to stem the tide of this unnecessary burden as a lot of its victims suffer varying degrees of morbidities or even die without getting to the hospital.

Solving the problems of unsafe abortion in Nigeria however requires a pragmatic approach using public health measures. Primarily through educational programs to sensitize the community about the dangers of unsafe abortion, the use effective contraception ,the use of better techniques for abortion where the law permits and improving provider skills, secondarily by availability of post abortion care which entails prompt and appropriate treatment of complications and by taking measures to mitigates against its long term sequel. This reduces morbidity and prevents the possibility of subsequent unwanted pregnancy. These are suggested solutions to problems of abortion in countries with restrictive abortion laws. As a long term measure, rationalization of the abortion law will also help to reduce the incidence of unsafe abortions.

# CONCLUSION

There is a high prevalence of unsafe abortions in our environment. It continues to be a major contributor to maternal morbidity and mortality in the Niger Delta. Most of its victims are single adolescent school girls.

Efforts directed at reducing unintended pregnancy by comprehensive family planning programs and effective post abortal care services will reduce the problem while the legal status of abortion is being debated. Intense public health education and advocacy targeting policymakers is needed to increase political will for reducing abortion-related maternal deaths in Nigeria.

#### **REFERENCES**

1. Adefuye OP, Sule-Odu AO, Olatunji AO, Lamina MA, Oladapo TO. Maternal Deaths from Induced Abortion.

- Trop J Obstet Gynaecol 2003; 20: 101-104.
- 2. Akande OE. Reducing Morbidity and Mortality from Unsafe Abortin in Nigeria. Archives of Ibadan Med 2001; 2(1): 1113.
- 3. Ekanem AD, Etuk SJ, Udoma EJ, Ekanem IA, Bassey IE. What proportion of abortion seekers in Calabar are really pregnant? Trop J Obstet Gynaecol 2006; 23(1): 12 15.
- 4. Fasubaa OB, Olugbenga OD. Impact of post-abortion counseling in a semi-urban town of Western Nigeria. J Obstet Gynaecol. 2004; 24(3): 300-305.
- 5. Cook RJ, Dickens BM, Horga M. Safe abortion: W.H.O. Technical and policy guidance. Int J Gynaecol Obstet. 2004; 86(1): 79 84.
- 6. Fasubaa OB, Akindele ST, Adelekan A, Okwuokenye H. A Politico-medical perspective of induced abortion in a semi-urban community of Ile-Ife, Nigeria. J Obstet Gynaecol. 2002; 22(1): 51–57.
- 7. Ordinioha B, Owhonda G. Clandestine abortion in Port Harcourt: users' profile and motivation. Niger J Med. 2008 Jan-Mar;17(1):33-6.
- 8. Bankole A, Sedgh G, Oye-Adeniran BA, Adewole IF, Hussain R, Singh S. Abortion-seeking behaviour among Nigerian women. J Biosoc Sci. 2008 Mar;40(2):247-68. Epub 2007 Aug 22.
- 9. Ekanem EI, Etuk SJ, Ekabua JE, Iklaki C. Clinical presentation and complications in patients with unsafe abortions in University of Calabar Teaching Hospital, Calabar, Nigeria. Niger J Med. 2009 Oct-Dec;18(4):370-4.
- 10. Igberase GO, Ebeigbe PN. Exploring the pattern of complications of induced abortion in a rural mission tertiary hospital in the Niger Delta, Nigeria. Trop Doct. 2008 Jul;38(3):146-8.
- 11. Mohammed I. Issues relating to abortions are complicated in Nigeria. BMJ. 2003 Jan 25;326(7382):225.
- 12. Raufu A. Unsafe abortions cause 20 000 deaths a year in Nigeria. BMJ. 2002 Nov 2;325 (7371):988.
- 13. Sule-Odu AO, Olatunji AO, Akindele RA. Complicated induced abortion in Sagamu, Nigeria. J Obstet Gynaecol. 2002 Jan;22(1):58-61.
- 14. Ikechebelu JI, Okoli CC. Morbidity and mortality following induced abortion in Nnewi, Nigeria. Trop Doct. 2003 Jul;33(3):170-2.
- 15. Ezechi OC, Fasubaa OB, Dare FO. Abortion Related Deaths in South Western Nigeria. Nig J Med 1999; 8(3): 112-114.
- 16. Odeyemi K, Onajole A, Ogunowo B. Sexual behavior and the influencing factors among out of school female adolescents in Int J Adolesc Med Health. 2009 Jan-Mar;21(1):101-9. Mushin market, Lagos, Nigeria.
- 17. Omokhodion FO, Onadeko MO, Balogun OO. Contraceptive use among hairdressers in South-west Nigeria. J Obstet Gynaecol. 2007 Aug;27(6):612-4.
- Fatusi AO, Hindin MJ. Adolescents and youth in developing countries: Health and development issues in context. J Adolesc. 2010 Aug;33(4):499-508. Epub 2010 Jul 2.
- 19. Ezechi OC, Fasubaa OB, Dare FO. Contraceptive Promotion and Utilization. Solution to Problem of Illegally Induced Abortion in Countries with Restrictive Abortion Law. Nig Qt J Hosp Med 1999; 9(2): 167-168.
- 20. Anate M, Awoyemi O, Oyawoye O, Pelu IO, Raimi CM.

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- The continuing problem of procured abortion in Ilorin, Nigeria. The way out. Nig J Med 1997; 6(4): 106-111.
- 21. Family Health International: Tragic Cost of Unsafe Abortion. Network 1993; 14(2): 12-15.
- 22. Henshaw SK, Adewole I, Singh S, Bankole A, Oye-
- Adeniran B, Hussain R. Severity and cost of unsafe abortion complications treated in Nigerian hospitals. Int Fam Plan Perspect. 2008 Mar;34(1):40-50.
- 23. Okonofua F .E, Otoide V.O, Oronsaye F. Why Nigeria Adolescent Seek Abortion Rather than Contraception: