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Socio-demographic and clinical characteristics of women with unsafe abortion in south-western Nigeria

Ayokunle Moses OLUMODEJI [1], Taiwo Olufunmilayo KUKU-KUYE [1, 2, *], Olumide Emmanuel ADEWARA [3], Idowu Oluwaseyi ADEBARA [3], Adebayo Augustine ADENIYI [3], Olabisi Timothy ADEYEMO [3], Sunday Babatunde AWOYINKA [3], Adewummi BAKARE [3], Olumide Mojisola AYANKUNLE [3] and Ufuoma Oluwaseyi OLUMODEJI [4]

[1] *Institute of Maternal and Child Health, Lagos State University Teaching Hospital, Lagos, Nigeria.*
[2] *Department of Obstetrics and Gynaecology, Lagos State University College of Medicine, Lagos Nigeria.*
[3] *Department of Obstetrics & Gynaecology, Federal Teaching Hospital Ido-Ekiti & Afe Babalola University Ado-Ekiti, Ekiti State, Nigeria.*
[4] *Department of Ophthalmology, Lagos State University Teaching Hospital, Lagos, Nigeria.*

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Abstract

Background: Unsafe abortion is within the five leading causes of maternal mortality in sub Saharan Africa. For every one death related to unsafe abortion, about 25 more women suffer significant morbidity from complications of abortion The aim is to highlight their socio-demographic and clinical characteristics of women with unsafe abortion.

Methodology: This was a 5-year retrospective cross-sectional study of 84 women managed for complications of unsafe abortion, at the Federal Teaching Hospital Ido-Ekiti, in South Western Nigeria. Socio-demographic, clinical and abortion related data were obtained from their medical records. Data obtained were expressed in descriptive statistics.

Results: Unsafe Abortion accounted for 5.4% of gynaecological admission during the study period. The mean age of the women was 23.2years. They were majorly single (63%), nulliparous (50%) and had secondary level of education (39.3%). Of the 54 (64.3%) who were aware of modern contraceptive options, only 20.4% (11/54) had used contraception previously. About 57% (48/84) was having induced abortion for the first time. Not being ready for a child was the commonest (22.6%) reason provided for procuring abortion. About 85% (71/84) terminated their pregnancy in the first trimester with a mean gestational age of 10.1weeks. Dilatation and curettage was the commonest (56%) method employed. Sepsis and hemorrhage were the leading complications reported in 52.4% (44/84) and 40.5% (34/84) of the women respectively. The fatality rate observed was 2.4% (2/84).

Conclusion: Young, single, nulliparous, lowly educated women with no knowledge and usage of modern contraceptive options were identified to have more commonly had unsafe abortion. Sepsis and hemorrhage were the leading associated complications.

Keywords: Unsafe Abortion; Maternal mortality; Sepsis; Haemorrhage

1. Introduction

Women have sought and used various means to terminate unwanted pregnancies over the years. This has led to the concept of induced abortion which in Nigeria is the termination of pregnancy before 28 weeks gestational age

* Corresponding author: Taiwo Olufunmilayo KUKU-KUYE

[1]. Induced abortion could either be safe or unsafe [2]. The World Health Organisation defines unsafe abortion as a procedure to terminate an unintended pregnancy undertaken either by individuals lacking the necessary skills or in an environment that does not meet basic medical standards or both [3]. About 8 in 10 of induced abortion in Nigeria are "unsafe"[1].

Annually, 210 million women become pregnant worldwide while 80 million pregnancies are unplanned [4]. About half are terminated each year with 25 million being unsafe abortion [2,4]. Sub-Sahara Africa bears a greater proportion of unsafe abortion than the rest of the world [2]. In the region, abortion is commonest, clandestine and unsafe and contributing substantially to maternal mortality. About 85% of abortions in West Africa are considered unsafe [2,5]. The major reasons for this disproportion are poverty, religion, illiteracy and government policies [2].

Abortion laws vary from region to region [5]. In most western countries abortion is relatively liberal in contrast to most Sub-Sahara countries where restrictive abortion laws are practiced [2]. Restrictive abortion laws permit abortion only when the life of the mother is endangered [2]. Unfortunately, such scenarios are encumbered with increased unsafe abortion, poor utilization of health services and increased maternal morbidity and mortality [2,6]. Reliable data on the incidence of abortion and its complications is difficult to ascertain in areas with restrictive abortion laws [3,6]. The law on abortion is still restrictive in Nigeria and does not permit termination of pregnancy except when it is needed to save the life of the woman [5,7].

Nigeria has an abortion ratio of about 45 per 1000 women of reproductive age [8], with over 760,000 abortions estimated to occur in the country annually [5]. Unsafe abortion accounts for 70,000 maternal deaths worldwide and 20,000 maternal deaths in Nigeria each year and causes a further 5 million women to suffer temporary or permanent disability [5,7,8].

It has led to various complications commonest amongst which include haemorrhage, sepsis, uterine perforation, genital tract laceration, genital tract burns, vesico-vaginal fistulae, shock and death [1,7,8,9]. Late complications include the psychological feeling of guilt, ectopic gestation, uterine synechiae, chronic pelvic pain and infertility [2,4,5,9]. Apart from maternal demise, unsafe abortion also greatly imparts negatively on the finance and socio-economy of the woman and society at large [9,10].

This study evaluated for the socio-demographic and clinical characteristics of women who were managed for unsafe abortion.

2. Material and methods

This was a retrospective cross-section study, over a 5-year period, in which all cases of unsafe abortion managed at the Federal Teaching Hospital Ido-Ekiti, between 1st of January 2008 and 31st of December 2012 were reviewed. The records in the gynaecological ward were assessed to obtain the case file numbers of the eligible patients. Their medical files were subsequently retrieved and relevant data relating to the socio-demographic profile of the patients, clinical presentation, mode of termination of pregnancy, reasons for the abortion, and qualification of abortion providers, types of complications and management were extracted into study proforma. Data obtained were anonymized to ensure patient confidentiality. The data obtained were entered into an IBM-compatible personal computer and analyzed and expressed in descriptive statistics using SPSS17 for Windows statistical package (version 7.5). The ethical approval was obtained from

3. Results

Of the 91 case files sought, 84 were obtained and analyzed, giving a percentage of 92.3%. During the study period a total of 1673 patients were admitted into the gynaecological ward. Unsafe abortion constituted 5.44% of gynaecological admissions.

The age range of the patients was 15 to 43 years with a mean of 23.21 years and a modal age of 21 years (Figure 1). Fifty three (63.1%) were single, 28 (33.3%) were married and 3 (3.6%) were separated; Seventy two patients (85.7%) were Christians while 12 (14.3%) were Muslims (Table 1). Sixty nine patients (82.1%) were Yoruba, 10 (11.9) were Igbo and 5 (6.0%) were of the other minor tribes.

Three of the women (3.6%) had only primary education and 33 (39.3%) were still in secondary school or had secondary education as their highest level of education. Twenty four (28.6%) had some form of tertiary education while another

24 (28.6%) had no form of education. Eight patients (9.5%) were unemployed, 33 patients (39.3%) had petty jobs while 43 (51.2%) were students. Forty two (50%) patients were nulliparous, 27 (32.1%) were primiparous, 12 (14.3%) were multiparous and 3 (3.6%) grand multiparous (Table 1).

Fifty four patients (64.3%) were aware of contraceptive options while 30 (35.7%) were not aware of such options. Of the 54 patients who were aware of contraceptive options only 11 (20.4%) had used one form or the other of contraception at some points in their life, 43 (79.6%) had not used. The number of previous voluntary termination of pregnancy the patients have had showed forty eight patients (57.1%) had no previous induced abortions, 19 (22.6%) had one, 5 (6%) had 2, 10 (11.9%) had 3 and 2 (2.4%) had more than three. Thirty two (38.1%) patients did not state why they terminated their pregnancies. 22 (26.2%) were not ready to have a child, 19 (22.6%) aborted for schooling reasons, 8 (9.5%) were still nursing a child and 3 (3.6%) had marital problems (Table 1).

The mean estimated gestational age at termination of pregnancy was 10.14 weeks with a mode of 7 weeks. Seventy one of the women (84.5%) had induced abortion in the first trimester while 13 (15.5%) had in the second trimester (Figure 2).

One in four (26%) sought a nurse for abortion, 18% abortionists were doctors, 16% were chemists', 8% were self-induced and 29% others (Figure 3). Most (47) abortionists used dilatation and curettage (56%), 16 (19%) employed manual vacuum aspiration, 11 (13.1%) used medical means and 3 (3.6%) used oxytocin infusion. 7 patients (8.3%) used herbal medications (Figure 4). The commonest complication was sepsis in 44 patients (52.4%) followed by haemorrhage in 34 patients (40.5%). Other complications were genital tract laceration, acute renal failure and faecal fistula (Figure 5).

All the patients received antibiotic therapy and 34 patients (40.5%) had blood transfusion. Twenty one (25%) patients had no form of surgery, 44 (52.4%) had manual vacuum aspiration (MVA), 16 patients (19.1%) had exploratory laparotomy with abscess drainage in 12 (14.3%); bowel resection and anastomosis in 1 (1.2%) and MVA in 1. 3 (3.6%) patients had examination under anaesthesia with repair of laceration. Most (40) patients (47.6%) were discharged within 5 days of admission while 16 patients (19%) spent more than 15days on admission. There were 2 (2.4%) deaths, 1 (1.2%) referral on request, 13 (15.5%) discharges against medical advice and 68 (81%) discharges (Table 2).

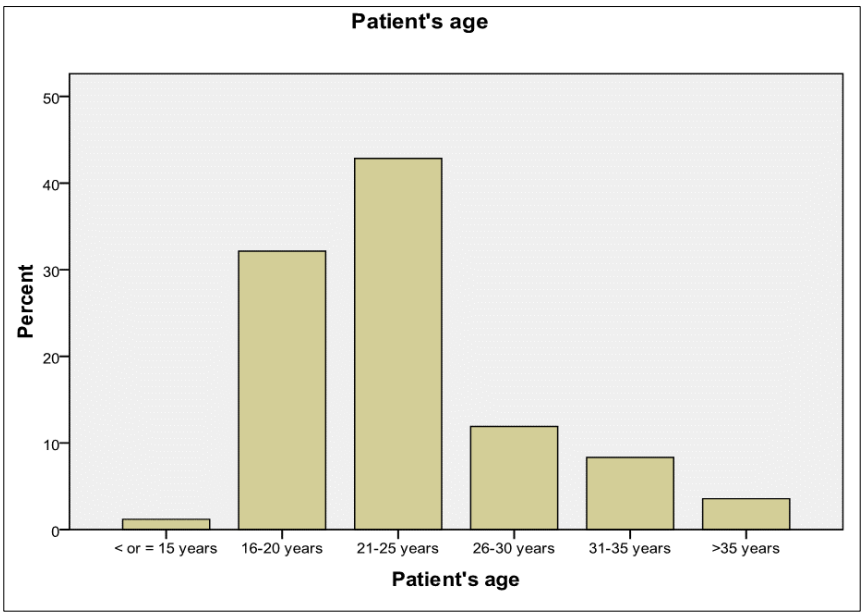

Figure 1 Age distribution of the women

Table 1 Socio-demographic and Clinical Profile

Variable	Frequency (N=84)	Percentage (%)
Educational Status		
No Formal Education	22	28.6
Primary	3	3.6
Secondary	33	39.3
Tertiary	24	28.6
Marital Status		
Single	53	63.1
Married	28	33.3
Separated	3	3.6
Religion		
Christianity	72	85.7
Islam	12	14.3
Occupation		
Students	43	51.2
Petty jobs	33	39.3
Unemployed	8	9.5
Civil servant	0	0
Parity		
Nulliparous	42	50.0
Primiparous	27	32.1
Multiparous	13	15.5
Grandmultiparous	2	2.4
Contraceptive awareness		
Aware	54	64.3
Not aware	30	35.7
Prior Contraceptive Usage		
No previous use	11	20.4
Previous use	43	79.6
Previous Termination of Pregnancy		
None	48	57.1
One	19	22.6
Two	15	6
Three	10	11.9
Four and more	2	2.4

Reasons for Termination of Pregnancy		
None	32	38.1
Not ready to have a child	22	26.2
Schooling	19	22.6
Breastfeeding	8	9.5
Marital status	3	3.6

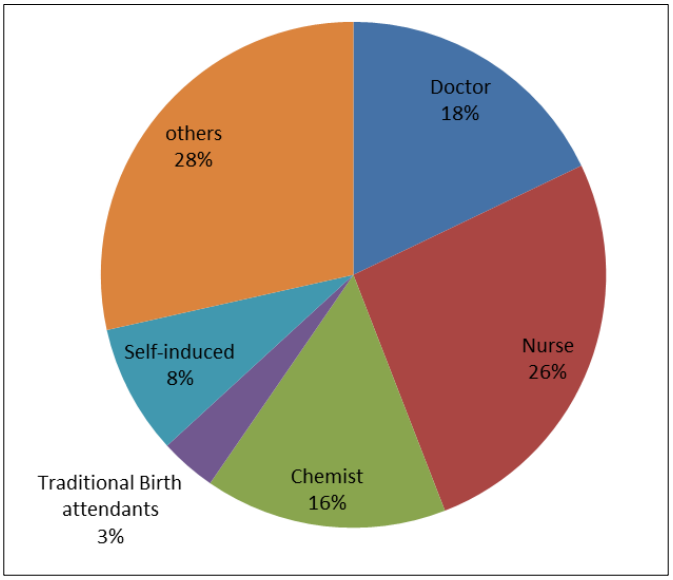

Figure 2 % distribution of qualification of abortion provider

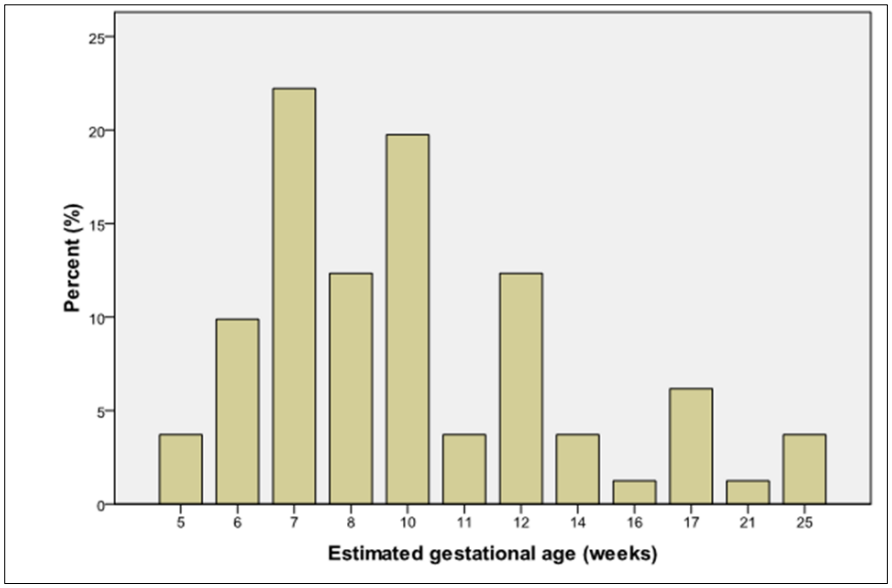

Figure 3 Gestational age at procurement of abortion

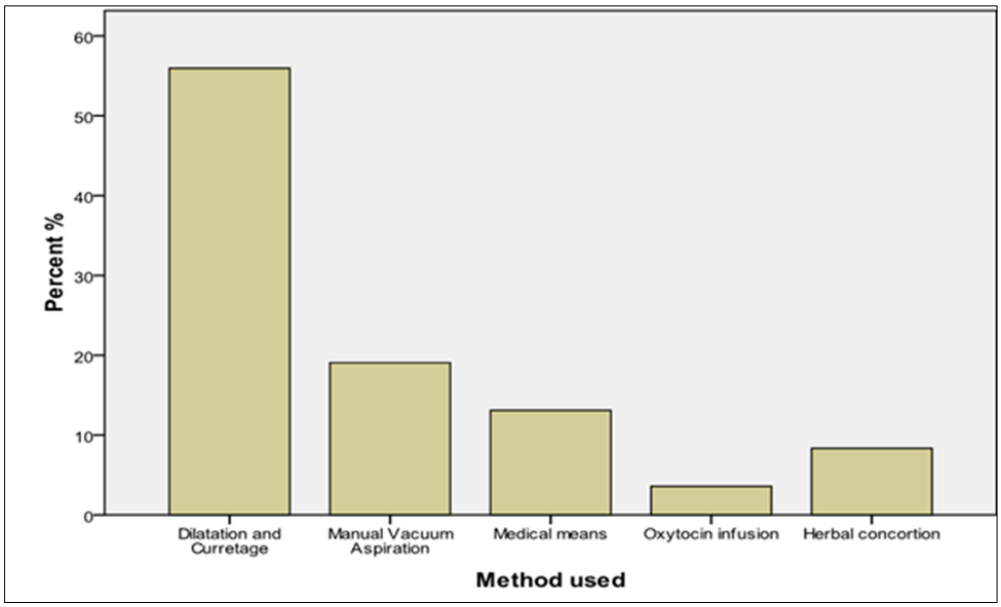

Figure 4 Method used by abortionist

Table 2 Distribution of post abortal care and outcome

Treatment	Frequency (n=84)	Percentage (%)
Surgical treatment		
Manual vacuum aspiration	44	52.4
Exploratory laparotomy	16	19.1
Exploratory Laparotomy & abscess drainage	12	14.3
Bowel resection & anastomosis	1	1.2
Examination under anaesthesia and repair of laceration	3	3.6
Medical treatment		
Antibiotics	50	59.5
Antibiotics and blood transfusion	34	40.5
Blood transfusion only	0	0
Outcome		
Referral	1	1,2
Discharge against medical advice	13	15.5
Discharge	68	81
Death	2	2.4

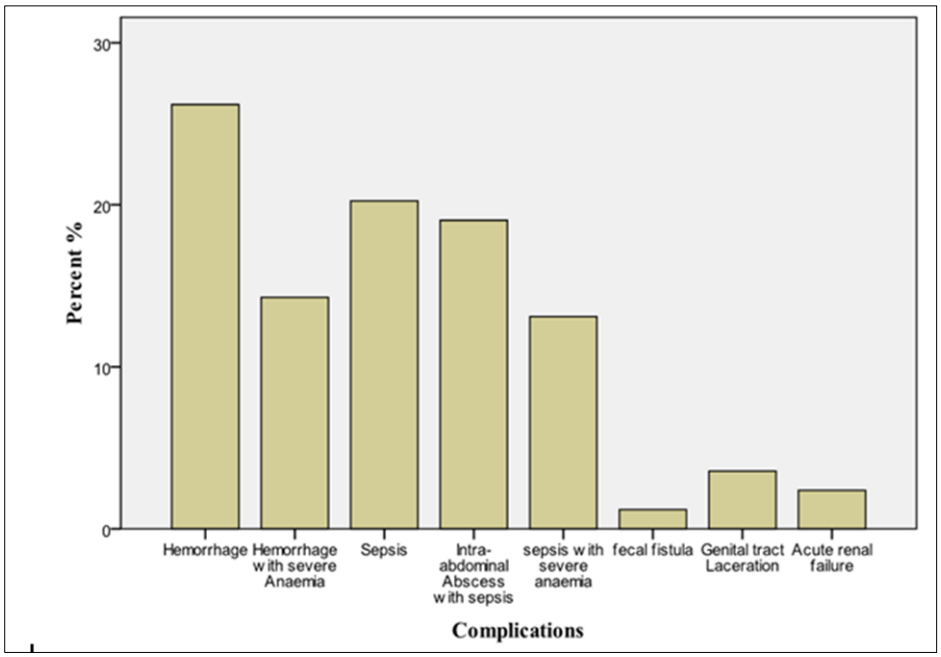

Figure 5 Complications rates among the women

4. Discussion

The prevalence of unsafe abortion was 5.44% of gynecological admissions. This was similar to the finding by Akinriola et al found the incidence in Nigeria ranges from 27-44 per1000 [10]. The wide range of disparity results from religion, cultural and socioeconomic distribution [10]. The age range of 15 – 43 years, mean age of 23.21 years and modal age of 21 years with preponderance in the teenage group in this study are in agreement with a retrospective study in Nigeria that reported a mean age was 29 years [5]. A tertiary hospital in Lagos age range was 16-25 years [12]. In Ethiopia, the average age among adolescents was 17 years in contrast to 22 years among non-adolescent [11].

Previous studies also support the finding in this study of a majority of patients are nulliparae, unmarried and of secondary educational status [12]. This may be due to the fact that secondary school authorities abhor pregnancy among their students and induced abortion is, therefore, necessary for the students to stay in school. The other common reason for termination of pregnancy among students is not being ready to marry and have a child. About 2/3rd (63.1%) of these patients were single which has been cited as an important characteristic of women seeking induced abortion even in

Other reasons given by other women give for having an abortion include a desire not to disrupt their education, that they had completed their families or that their partners refused paternity [13]. The restrictive abortion law in Nigeria makes many abortions self-induced or obtained secretly from medical or nonmedical practitioners [2,8,9,10]. 'Doctors' were involved in over 18% of the cases, 'Nurses' in 26% of cases and Chemists in 16% of cases among others. This may be questionable as most abortion service providers are referred to as doctors irrespective of their professional qualifications. This is so as patients are sometimes unable to make the distinction between the various providers and the likelihood of complication is high with untrained personnel. Interestingly, abortions were perpetrated by patent medicine vendors, auxiliary nurses, health attendants and least by licensed medical doctors [12,13,14].

With over 84.5% of the abortions being in the first trimester in this study, it is no surprise then that most cases were done by dilatation and curettage (56%) followed by manual vacuum aspiration (19%) which also supports previous findings on the subject [2]. Some providers resort to using unscientific and highly toxic methods such as codeine tablets and estrogen injection, devices such as sticks, chicken bones, coat hangers and bicycle spokes to terminate the pregnancy [8,12-14]. This unhealthy practices gives rise to the unwanted health, social and economic consequences [10] Others have reported the second trimester as the commoner timing for abortion [2,14].

Despite the increasing rate of sexual activity amongst adolescents, there is a low rate of contraceptive use in our environment. The prevalence of contraceptives in Nigeria is 14% [15]. [15] Only 64.3% of patients studied were aware of contraceptive options and just 20.4% of them had used a form of contraception in the past. In addition, many of our women use abortions as means of contraception. The major cause unsafe abortion is unintended or unwanted

pregnancy.[6] More than half of unintended pregnancies ended in an induced abortion; 32% ended in an unplanned birth and 12% in a miscarriage.[6] This mirrors the unmet need incidence

The major reason for the procedure was not being ready to have a baby, the second major reason was education. This is expected in view of the age group the women. A few stated breastfeeding and marital problems for the most married women. Education is the mostly the most important cause seen among most teenage girls [8,13].

With the predominant complications in this study being haemorrhage due to retained products and post abortal sepsis, which is in consonance with other studies, antibiotic therapy, blood transfusion and evacuation of retained products of conception by manual vacuum aspiration formed the majority of treatment received [8,13,16]. Sepsis and sepsis-related complications are the commonest causes of maternal mortality from abortion in Nigeria [12,13,16]. Severe sepsis and late presentation were both responsible for the two deaths in this study as noted in previous studies as common causes of mortality from unsafe abortion [14,15]. In Nigeria, unsafe abortions lead to 13% of maternal mortality[13] and 14% of all maternal deaths in Africa [2].

5. Conclusion

In conclusion, a prevalence of 5.4% of gynaecological admission was noted in this study with a case fatality of 2.4%. Adolescent single students were majorly affected. The prevailing hazard of unsafe abortion is a source of concern and the desire to reduce its associated high incidence of mortality and morbidity in our women is achievable. This dilemma can be reduced if the uptake of contraceptives is increased as well as improved sexual education among youths and women in the reproductive age group. There is also need to continue the training of doctors who are involved in performing in induced abortions.

Compliance with ethical standards

Disclosure of Conflict of Interest

No conflict of Interest

Statement of ethical approval

The ethical approval was obtained from the ethical committee of the Lagos State University Teaching Hospital Lagos.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study

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