

Complications of unsafe abortion in South West Nigeria: a review of 96 cases

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Abstract

Background: Induced abortion is common and largely performed under clandestine and unsafe conditions in Nigeria. Complications from such procedures contribute significantly to maternal morbidity and mortality in the country.

Objective: To determine the sociodemographic characteristics and pattern of complications present in patients managed for unsafe abortion.

Setting: The patients studied were treated in Federal Medical Centre, Ido Ekiti, a tertiary health institution located in a rural town and a main referral hospital in Ekiti State, South West Nigeria.

Methodology: The records of patients admitted for complications of unsafe abortion over a 5-year period were analyzed with regard to sociodemographic characteristics, gestational age at termination of pregnancy, the providers, methods used and the complications they develop.

Results: A total of 102 patients were treated for complications of unsafe abortion during the period under review constituting 7.4% of total gynaecological admission. Majority (60.4%) of the patients were less than 25 years old, 74.0% were students while 81.3% were unmarried. Only 9.4% of the women had ever used contraceptives. Of all the cases, 21 (21.9%) were performed within 8 weeks of gestation while 47.9% were performed in the second trimester. Surgical uterine evacuation was the method used in 67.7% of the patients and 65.6% of the abortions were performed by non physicians. Sepsis was the commonest complication in the patients (79.2%) while uterine perforation was present in 12.5% of the women. The case fatality rate was 16.6% and unsafe abortion accounted for 30.8% of all maternal mortality during the period.

Conclusion: As young single nulliparous students are the principal sufferers of complications of unsafe abortion in this study, young persons, especially in-school adolescents, should be targeted for the provision of comprehensive reproductive health services.

Keywords: *Unsafe abortion, complications*

Résumé

Introduction : L'avortement induit est commun et en grande partie exécuté dans des conditions clandestines et à risque au Nigéria. Les complications de telles procédures contribuent de manière significative à la morbidité et mortalité maternelles dans le pays. L'objectif de cette étude était de déterminer les caractéristiques et la fréquence sociodémographique des complications récentes chez les patients contrôlés pour l'avortement à risque.

Méthodologie : Les patients étudiés ont été soignés au centre médical fédéral, Ido Ekiti, une institution de santé tertiaire située dans une ville rurale et un hôpital principal de référence dans l'Etat d'Ekiti, au sud du Nigéria. Les registres des patients admis pour des complications d'avortement à risque sur une période de cinq ans ont été analysés en ce qui concerne des caractéristiques sociodémographiques, l'âge gestationnel à l'arrêt de la grossesse, les fournisseurs, des méthodes employées et les complications qu'ils développent.

Résultats : Un total de 102 patients a été soigné pour des complications d'avortement à risque au cours de la période à l'étude constituant 7,4% de l'admission gynécologique totale. La majorité (60,4%) des patients avait moins de 25 ans, 74,0% étaient des étudiants tandis que 81,3% étaient célibataires. Seulement 9,4% des femmes n'avaient jamais employé des contraceptifs. De tous les cas, 21 (21,9%) ont été exécutés dans un délai de 8 semaines de gestation tandis que 47,9% étaient exécutés dans le deuxième trimestre. L'évacuation utérine chirurgicale était la méthode employée chez 67,7% des patients et 65,6% des avortements ont été exécutés par des non-médecins. La septicémie était la complication la plus commune chez les patients (79,2%) tandis que la perforation utérine était présente chez 12,5% des femmes. Le taux des dégâts des cas était 16,6% et l'avortement à risque a expliqué 30,8% de toute la mortalité maternelle au cours de la période.

Conclusion, les jeunes étudiantes nullipares célibataires sont les principales victimes des complications de l'avortement à risque dans cette étude, des jeunes particulièrement adolescents internés, devraient être visés pour la prestation des services complets d'éducation en santé reproductive et anténatale.

Introduction

It is estimated that close to a million induced abortions are performed yearly in Nigeria, many of which are

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by unqualified providers using unsafe methods [1]. Complications from such procedures account for 20-40% of about 60,000 maternal deaths that occur yearly in the country [2]. The magnitude of the problem is often the subject of various political, legal, religious and scientific discourses. Reports from previous studies in other parts of Nigeria on women hospitalized for complications of unsafe abortion show that they cut across all age groups, marital status and socioeconomic levels [1,3,4,5,6]. Complications of unsafe abortion reported in these studies include infection, haemorrhage, visceral injury and death [1,3,4,5,6]. In survivors, long term consequences include infertility, ectopic pregnancy, chronic pelvic pain and genital fistulae [4-6].

Measuring the extent of abortion related care is essential for assessing the social and health implications of unsafe abortion and its impact on health service delivery needs. This paper is a retrospective study of patients managed for complications of unsafe abortion at the Federal Medical Centre, Ido Ekiti, Ekiti state in South West Nigeria. To the best of our knowledge, no report on the magnitude and pattern of complications of unsafe abortion in this part of South West Nigeria is available in the literature. This study was therefore designed to evaluate the sociodemographic characteristics, pattern of complications and outcome of management of patients presenting with unsafe abortion. The aim is to highlight the particular women group at risk of developing complications from unsafe abortion and the pattern of injuries suffered in this part of South West Nigeria.

Materials and methods

The study covered the period from January 1, 2005 to December 31, 2009. The records of all women treated for complications of unsafe abortion over the 5-year period were reviewed. The information extracted included age, marital status, educational level, parity and duration of gestation. The status of service providers, technique used and the complications present were also noted.

The data obtained was analyzed using the SPSS package version 9.0. For the descriptive aspects of the analysis, frequency distributions were generated for all categorical variables. Means and standard deviation were determined for quantitative variables.

Results

During the period under review, there were a total of 1378 gynaecological admissions at the Federal Medical Centre, Ido Ekiti. Among these, 102 patients were admitted with complications of unsafe abortion. This represents 7.4% of total gynaecological

admissions. Of these, the detailed records of 96 (94.1%) patients were available for analysis.

The sociodemographic characteristics of the patients were as shown in Table 1. The mean age of the patients was 23.7 years (range = 16-42 years). Fifty eight (60.4%) patients were young women less than 25 years old while more than a third (38.5%) were teenagers. Seventy eight (81.3%) patients were unmarried, five (5.2%) were separated from their spouse or widowed while 13 (13.5%) were married. Seventy one (74.0%) patients were students with at least a secondary education. The remaining 23 (26.0%) were artisans, petty traders or civil servants. Seventy four (77.1%) patients were nulliparae while 19 (19.8%) patients had at least 3 previous deliveries. Fifty four (56.3%) patients had induced abortion prior to the index one. On the other hand, only 9 (9.4%) women agreed to previous contraceptive use.

Table 1: Sociodemographic characteristics of the patients.

Age	No	%
15-19	37	38.5
20-24	21	21.9
25-29	20	20.8
30-34	11	11.5
≤35	7	7.3
<i>Marital Status</i>		
Single	78	81.3
Married	13	13.5
Separated/Widowed	5	5.2
<i>Educational Status</i>		
None/Primary	25	26.0
Secondary	36	37.5
Tertiary	35	36.5
<i>Parity</i>		
0	74	77.1
1-2	3	3.1
3 and above	19	19.8
Total	96	100

As shown in Table 2, 21 (21.9%) of the abortions were performed within 8 weeks of gestation while 46 (47.9%) patients had abortions in the second trimester. Six (6.2) women had abortion at gestational age beyond 20 weeks. Abortion providers were physicians in 33 (34.4%) patients and non physicians in 63 (65.6%) women. Methods used for procuring abortion were suction evacuation or dilatation and curettage in 65 (67.7%) patients, abortifacients in 9 (9.4%) patients and herbal preparations in 19 (19.8%) patients.

Table 2: Gestational age, abortion providers and methods used.

Gestational age (weeks)	No	%
≤ 8	21	21.9
9-12	29	30.2
13-20	40	41.7
> 20	6	6.2
<i>Provider</i>	No	%
Medical Doctor	33	34.4
Nurse	15	15.6
Quack	26	27.1
Traditional	17	17.7
Self induced	3	3.1
Friends	2	2.1
<i>Methods</i>	No	%
Surgical abortion	65	67.7
Injections/tablets	9	9.4
Herbs	19	19.8
Not revealed	3	3.1
Total	96	100

Table 3: Complications and mortality in patients with unsafe abortion

Complication	No	%
Genital Sepsis	76	79.2
Peritonitis/intraperitoneal abscess	24	25.0
Septicemia	5	5.2
Incomplete abortion	31	32.3
Haemorrhage	11	11.5
Shock	13	13.5
Visceral Injuries	23	24.0
Vagina	5	5.2
Cervix	9	9.4
Uterine perforation	12	12.5
Intestines	9	5.2
Acute Renal Failure	3	3.1
Pulmonary Complications	4	4.2
Bacteria Endocarditis	2	2.1
Maternal Death	16	16.6

The complications developed by the patients are shown in Table 3. There was evidence of genital sepsis in 76 (79.2%) patients with involvement of the general peritoneum and intraperitoneal abscess in 24 (25%) patients. Thirty one (32.3%) patients had incomplete abortion. There was severe haemorrhage in 11 (11.5%) patients. Visceral injuries were present in 23 (24.0%) patients and these were mostly to the uterus and intestines. One of the patients had complete avulsion of the posterior uterine wall and a portion of the sigmoid colon. Another patient with intestinal injury developed faecal fistula following laparotomy. Two patients were diagnosed

with infective endocarditis with one of them resulting in mortality. There were a total of 16 deaths among the 96 patients reviewed, giving a fatality rate of 16.6%. This represents 30.8% of the 52 maternal deaths that occurred in the hospital during the period under review.

Discussion

It is illegal under Nigerian legal system to perform or obtain abortion except to save a woman's life [7]. Nevertheless, women seek and obtain abortion to avoid premarital births and control family size [1]. This study, overwhelming majority of the patients were young unmarried students among whom pregnancy is viewed with strong social disapproval. Similar findings have been reported in different parts of Nigeria over the years [3,5,6,8]. While the scale of sexual activity among single young Nigerian women is known to be high, there is no corresponding increased usage of contraceptives [9,10]. In this study, more than half of the patients had induced abortion prior to the index one while less than 10% admitted to previous contraceptive use. Thus, our result once again indicates suboptimal use of contraceptive among young Nigerian women.

Many induced abortions in Nigeria are known to be performed by non physicians and sometimes by persons who have no formal medical training [1]. Abortions performed by such persons are prone to complications. Over 60% of the patients in our study had the abortion performed by non physicians. However, a third of the abortion providers were doctors. Thus it cannot be assumed that medical doctors know how to perform safe abortion. It has been observed that many physicians are not adequately trained in the application of modern abortion technique [11]. Also, surgical uterine evacuation was the method most commonly used even though the gestational age pattern showed that only a fifth of the abortions were performed within 8 weeks of gestation when suction evacuation is much less associated with complications [12]. Furthermore, herbal preparation was the method used in about 20% of the patients. Thus, a combination of inappropriate methods and unqualified providers contributed to the development of complications in many of the patients. These observations are true of countries with restrictive abortion law where abortion services are not freely available and often clandestine with women, especially younger teenagers, depending on mostly untrained providers and unsafe methods that are available to them [3].

Infection was the commonest complication among the patients in this study. It was found in 79.2% of the patients with development of intraperitoneal abscess in about a third of them. Similar high rates of infection among women admitted for complications of unsafe abortion have been reported by other authors [3-6]. In one series, all patients admitted for complication of unsafe abortion showed evidence of infection [4]. Women who harbour infection in the lower genital tract at the time of abortion are particularly at risk [14]. Studies in Nigeria have shown a high prevalence of asymptomatic genital tract infection among general women population [15,16]. Obviously, women with unwanted pregnancy are also most likely victims of sexually transmitted genital tract infection. Thus, morbidity from infection could be reduced by administration of antibiotics at the time of abortion and it is wise to treat all women presenting with complications of induced abortion as an infected case.

Complications from unsafe abortion accounted for 30.8% of all maternal deaths in the hospital during the period under review. Though this figure falls within Nigerian estimates of 20–40% [2,3] it almost triples worldwide value of about 13% of all maternal mortality [2,3,5]. It is more disturbing realizing that this represents 'a tip of the iceberg' as many die within the community while trying to conceal their actions because of the clandestine nature of abortion services in our locality [13]. Those who survive are prone to long term reproductive morbidities like infertility, ectopic pregnancy, chronic pelvic pain, Asherman's syndrome and genital fistulae [19,20,21].

Conclusion

In summary, young single nulliparous students are principal sufferers of complications from unsafe abortion in our locality. The dearth of qualified abortion providers because of the restrictive abortion law in Nigeria leaves these women to adopt strategies that are easily available to them to manage their reproductive life even if such approaches mean risking their life. Abortion is also being used as an alternative to contraception to prevent premarital birth. There is an unmet need for contraceptives among these young women.

Thus, youth friendly services should be made available to cater for the reproductive health needs of these women. There is also a strong need to carry out critical appraisal of the medical curriculum to adequately train physicians in modern abortion techniques. At least, it may be needed to save maternal life under a restrictive legal condition. With the realization that restrictive abortion laws do not

prevent abortion but merely drive the practice underground and make it unsafe and hazardous to women's lives, the need to liberalize the abortion law in Nigeria cannot be over-emphasized. Finally, medical personnel need to be adequately trained in effective post-abortion care to reduce morbidity and mortality.

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