Characteristics of patients presenting with complications of abortion in a tertiary health facility in south-west Nigeria

Adeniji AO, MBBS, FWACS, FMCOG, Reader
Atanda OOA (MBBS), FMCOG, Lecturer
Adeyemi AS; MBBS, FWACS, Senior Lecturer
Department of Obstetrics and Gynaecology, College of Health Sciences
Ladoke Akintola University of Technology, Ogbomoso, Nigeria
Correspondence to: Adetunji Adeniji, e-mail: tunji1802@yahoo.com
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Abstract

Objectives: Abortion is associated with significant healthproblem with short- and long-term complications that affect the quality of life of those who are fortunate enough to escape mortality. This study evaluated the population of patients with complications of abortion, identified the abortion providers and the pattern of contraceptive usage in these patients managed in our hospital, and suggests strategies on the required heath intervention.

Design: The design was a descriptive study of cases of abortions with complications.

Setting and subjects: We reviewed all (225) cases of abortions with complications managed at Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Nigeria, over a five-year period.

Outcome measures: Records of patients managed for abortion-related complications were retrieved, data were extracted and analysis was carried out for socio-demographic factors and other abortion-related characteristics.

Results: The study showed a more common occurrence of abortions among middle-aged (64.4%), multiparous (53.3%) women with a low socio-economic background (62.6%), and they were performed mostly by medical doctors in private settings (37.8%). The low usage of contraception (11.1%) was of significance.

Conclusion: This study provided considerable insight into the complications of abortion in a tertiary institution in Nigeria. Most of the patients were aware of contraception, but usage, which mainly constituted emergency contraception, was low. Despite prophylactic antibiotics, sepsis was the most common observed complication. Healthcare intervention should be re-focused through the encouragement of the adoption of effective methods to prevent unwanted pregnancies. Healthcare providers should re-appraise their antibiotics regimen.

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Introduction

Every year, 40-million induced abortions occur globally, of which 19 million are unsafe. Approximately 68 000 women die from abortion-related complications. Between 2- to 7-million women survive, but with long-term sequelae.[1]

Septic abortion is an important problem in many resource-poor settings. The prevalence is as high as 86%.[3] It significantly contributes to maternal death.[2,3] At the beginning of the 21st century, it is a matter of great concern that maternal mortality rates are still alarmingly high. Adolescents constitute a significant proportion thereof, as they face unique barriers that prevent them from obtaining safe abortions. They are slower to recognise and accept pregnancies, and are less likely than older and more experienced women to know where to seek advice and help.[4] They are also more likely to avoid paying the physician's fee, thus exposing themselves to ineffective methods.[5] Added to the above is the need to remain in school and fear of social reprisal arising from out-of-wedlock pregnancies.[6] Increasingly, in areas with high fertility, older women want smaller families and greater control over the timing of their births. These women are at risk of unwanted pregnancies and induced abortion if their family planning needs are not met.[7]

In places where abortion laws are restrictive, alternative clandestine outlets exist to services that are provided by doctors and other professional groups, such as midwives and nurses. These poorly supervised procedures involve

the use of contaminated instruments, methods that induce incomplete abortion, and insertion of hygroscopic cervical dilators or uterine syringing with chemicals that are designed to induce incomplete abortion.[8] Although they may be expensive and not readily available, some doctors provide safe abortion services comparable to those which are obtainable in resource-abundant environments. This is despite the fact that abortions remain restricted in Nigeria; the exception being to save a woman's life.[9] Two major factors contribute to the development of sepsis. These are the presence of retained products of conception because of incomplete spontaneous or induced abortion, and the introduction of infection from septic procedures into the uterus which can spread beyond the pelvis, causing septicaemia, and even leading to death.

The objectives of this study were to determine the population at risk of abortion, to identify the abortion providers and to evaluate the pattern of contraceptive usage in patients managed for abortion complications in our hospital, and to appropriately strategise on the required heath intervention.

Method

This was a descriptive review of all cases of complicated abortions managed at Ladoke Akintola University of Technology Teaching Hospital, Osogbo, Nigeria, over a five-year period (January 2005 to December 2009). Ethical approval for the study was obtained from the institution's ethical committee. Case files of patients managed for abortion-related complications were retrieved from the Health Records Department of the hospital. A pre-designed data-collection form was used to collate the required information. This was analysed using SPSS® version 11.

Results

There were a total of 2 620 gynaecological admissions, of which 263 (10.03%) were cases of septic abortions and related complications. Two hundred and twenty-five case notes with complete entries were retrieved and analysed.

Most cases of complicated abortion followed induced abortion (77.8%). The average age group was between 20 and 35 years of age (64.4%). There was equal distribution among married and single women (46.7%). Multiparous women were more at risk (53.3%), closely followed by nulliparous women (44.4%). The majority of these women either had a low socio-economic background (62.6%), or were engaged in unskilled labour (42.2%), despite the fact that half of the population at risk had at least a secondary education (51.1%).

The majority of the patients were having an abortion for the first time (> 80%). Most commonly, abortion providers were medical doctors (37.8%) in private hospital settings (51.1%),

Table I: Characteristics of women with complications of abortion (n = 225)

Type of abortion with complications	Numbers	%
Spontaneous	50	22.2
Induced	175	77.8
Age of woman		
< 20 years	70	31.1
20-35 years	145	64.4
> 35 years	10	4.4
Marital status		
Single	105	46.7
Married	105	46.7
Separated	5	2.2
Divorced	10	4.4
Widowed	-	-
Parity		
Nulliparous	100	44.4
Para 1-4	120	53.3
Para ≥ 5	5	2.3
Occupation		
Dependent	75	33.3
Unskilled	95	42.2
Semi-skilled	40	17.8
Skilled	15	6.7
Income		
Dependent	75	33.4
Low income	140	62.2
Middle income	10	4.4
High income	-	-
Educational level		
None	-	-
Primary	95	42.2
Secondary	115	51.1
Tertiary	15	6.7
History of previous abortion		
Yes	30	13.3
No	195	86.7
Abortion provider		
Medical doctor	85	37.8
Nurse or midwife	30	13.3
Pharmacist	25	11.1
Others	35	15.6
Abortion centre		
Private hospital	115	51.1
Chemist	35	15.6
Teaching hospital	5	2.2
Others	20	8.9
Method of abortion		
Dilatation and curettage	105	46.7

Manual vacuum aspiration	15	6.7
Prostaglandins	20	8.9
Other drugs	30	13.3
Herbs	5	2.3
Gestational age at abortion		
4-13 weeks	160	71.1
14-26 weeks	65	28.9
Antibiotic use for prophylaxis		
Yes	120	53.3
No	105	46.7
Complications		
Sepsis	160	71.1
Uterine perforation	30	13.3
Bowel injury	20	8.9
Haemorrage or anaemia	15	6.7
Contraceptive awareness		
Yes	190	84.4
No	35	15.6
Contraceptive usage		
Yes	25	11.1
No	200	86.9
Types of contraception chosen by those who use contraceptives		
Male condom	10	40
Emergency contraception pills	15	60

although nurses and pharmacists were also involved. The most common method of abortion was dilatation and curettage (46.7%), followed by the use of abortifacients (13.3%).

Generally, the decision to abort and procure abortion occurred within the first trimester (71.1%), while 28.9% had a second-trimester abortion. Prophylactic use of antibiotics following the abortion process was not remarkable between the groups (53.3% vs. 46.7%). Sepsis was the most common presentation (71.1%), followed by other complications: uterine perforation (13.3%), bowel perforation (8.9%) and haemorrhage leading to anaemia (6.7%). Eighty-four per cent of the studied cases were aware of contraceptive methods, but only 11.1% of this group used any form of contraception. Six out of 10 patients (60%) practised emergency contraception, compared to 40% who used male condoms. No other form of contraception was reported by the patients in this study.

Discussion

This study showed the characteristics of women presenting with complications of abortion. The fact that women resort to unsafe abortion, despite its risks, reflects the unmet need for safe, effective and acceptable ways of avoiding pregnancy or limiting family size. This is usually common in 20% of countries in the world with restrictive abortion laws,[9] including Nigeria.[5] Most women who opted for an unsafe abortion were multiparous and probably didn't want any more children, contrary to findings reported in the Western literature, wherein most cases are unmarried primigravidae of < 25 years of age.[3,10] Although a study in Nigeria had also shown adolescents to be the most vulnerable group,[8] this study, like some others,[3,9,10] showed a prevalence in women between 20 and 35 years of age. Similarly, in these studies, multiparous women were implicated more, a pointer to the fact that this may be as a result of desperation in wanting to limit the family size.[1]

It is likely that the low prevalence among young adolescents in this study might be because of cultural values that are widely practised in Osogbo and other towns, and the fact that adolescent marriage is not rampant.[4] In general, all studies, including this one, have shown that women of low socio-economic class and middle class are implicated the most in seeking termination of unwanted pregnancies.[3,8,10]

Finance plays a role in determining where a woman will seek an abortion service. The question remains whether the educated, high socio-economic class seek abortion in standard facilities, where safety is better ensured, or whether they have no cause to abort, based on having a settled home and contraceptive knowledge and usage.[6,11]

Doctors still rank the highest as unsafe abortion providers and use possible substandard practices, while introducing micro-organisms following breach of aseptic procedures.[1] Others, such as nurses and pharmacists, also identified in other studies, still contribute to this burden of unsafe abortion and are generally implicated in medical termination of pregnancies using drugs.[8,12] Dilatation and curettage still cause the most harm, as shown in this study and others that were carried out in Nigeria.[7,8,13] Therefore, there is a need for better awareness among doctors of the use of manual vacuum aspiration as it is relatively safer in terms of lower incidence of uterine perforation, although not in terms of septic complications.[2,14]

From this study, prophylactic antibiotics use was not shown to protect against the incidence of septic abortion. However, this may not be conclusive as it was impossible to establish antibiotic type, duration, quality and compliance. Most women procure abortion in the first trimester and this limits the complication and length of hospital stay.[3,7] In this study, most women (71%) who sought abortion also did so within the first trimester.

Contraceptive availability and use differ in various countries and may be influenced by awareness, ease of distribution and cost. Poor contraceptive usage underlies a need to re-appraise the country's health education mechanism.

Those who use contraceptives utilise less effective methods such as the postcoital pill (levonorgestrel), with reported significant failure rates, especially at mid-cycle exposure.[14] In this study and others, there was considerable awareness of contraceptives, but in general, usage was low.[6,15,16]

Conclusion

This study has provided considerable insight into the complications of abortion in a tertiary institution in Nigeria. Most of the patients were married, multiparous and were aware of contraception, but usage, which mainly constituted emergency contraception, was low. Despite prophylactic antibiotics, sepsis was the most common observed complication. Healthcare intervention should re-focus on encouraging the use of effective methods to prevent unwanted pregnancies. Healthcare providers should re-appraise their antibiotics regimen.

Conflict of interest

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

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