AN ANALYSIS OF SURGICALLY MANAGED CASES OF PELVIC ABSCESS COMPLICATING UNSAFE ABORTION

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Background: This study was carried out to study the demographic variables, treatment options and mortality in cases of abortion related pelvic abscess. **Methods**: A retrospective study of patients that had pelvic abscess as a complication of unsafe abortion. The retrieved case files were scrutinized for the necessary information. **Result**: The age ranged from thirteen years to forty six years, and teenagers accounted for 24.3% of the patients. About half of the patients, 51.4% were childless and parity ranged from zero to eight. The abortionists were mainly untrained personnel and the contraceptive prevalence rate was low, 5.4%. Most of the patient had conservative surgery and a significant number 94.6%, had blood transfusion. Maternal death of 18.9% was recorded with infection being the major cause. **Conclusion**: Unsafe abortion and its attendant complication is still a problem in Nigeria. High quality post abortion care will help a long way in saving many lives.

Key words: Unsafe abortion, Induced abortion, Pelvic abscess, Conservative surgery.

INTRODUCTION

Unsafe abortion is still a major problem in the developing world. Though a totally preventable cause of maternal mortality and morbidity, about 6% to 51% of maternal deaths in Nigeria are caused by unsafe abortion.[1] It also affects the women, families and communities through their long term complications. Potential morbidities are hemorrhage, uterine perforation, pelvic inflammatory disease and pelvic abscess. Others are chronic pelvic pain, infertility and ectopic pregnancy.

The World Health Organization defines unsafe abortion as a procedure for terminating unwanted pregnancy that is performed by someone lacking the necessary skill or in an environment lacking minimal medical standard or both.[2] In Nigeria, there are estimated six hundred and ten thousand (610,000) abortions performed each year,[3] many of these abortions are performed unsafely. Worldwide, 13% of maternal deaths are due to complications related to unsafe abortion[4] and many of these deaths occurs in countries where abortion is legally restricted, like Nigeria.[5]

Pelvic abscess is one of the complication of unsafe abortion that could result from postabortal pelvic inflammatory disease with or without perforated viscera especially the uterus. The study was undertaken to analyze cases of pelvic abscesses complicating unsafe abortion that were surgically managed in our institution.

MATERIAL AND METHODS

This is a retrospective study of surgically managed patients that developed pelvic abscess secondary to unsafe abortion. The review was done in Ahmadu Bello University teaching Hospital, Kaduna, Nigeria from January 1999 through December 2004. A total of forty one names were retrieved from the operation register, but thirty seven case files could be traced. The objective of the study is to find the demographic characteristic of the patients, whom the abortionist were and the treatment options offered the patients with the attendant cause of maternal deaths.

The patients were admitted, assessed clinically and investigated. They were resuscitated with intravenous fluids and blood transfusion in most cases and commenced on broad spectrum antibiotics to cover both aerobic and anaerobic micro-organisms. Patients were operated upon after adequate resuscitation and as soon as they become clinically stable and fit to withstand surgery. The microbial aetiology of pelvic abscess is not determined in this study, because of non availability of anaerobic culture facility in our hospital.

RESULT

The mean age of the patients was twenty five years, and the age range is from thirteen years to forty six years. Teenagers accounts for 24.3% of the patients, 48.6% and 18.9% were in their twenties and thirties respectively. In the study, 51.4% were childless and 16.2% had five or more children. The parity ranged from zero to eight with a mean of six. The marital status revealed that 75.9% were single and 13% married. A significant number, 62.2% were students and only 10.8% of the patients had no form of formal education. The abortionists were mainly untrained personnel, with about 13.5% likely to be trained medical personnel. The contraceptive prevalence rate was low amongst the patients reviewed, only 5.4% attest to regular use of contraceptive. Fever, abdominal pain with or without distention, vaginal discharge and pelvic mass were the four commonest mode of presentation on admission.

Table-1: Percentage distribution of selected characteristics

Characteristics n = 37(%)		
Age (Age Range: 13 – 46 years)		
10 – 14	3	8.1
15 – 19	6	16.2
20 – 24	11	29.7
25 – 29	7	18.9
30 – 34	5	13.5
35 – 39	2	5.4
> 40	3	8.1
Parity		
0	19	51.4
1	5	13.5
2	3	8.1
3	2	5.4
4	2	5.4
>5	6	16.2
Marital Status		
Single	28	75.7
Married	5	13.5
Divorced / Separated	3	8.1
Widow	1	2.7
Occupation		
Student	23	62.2
Skilled Workers	4	10.8
Unskilled Workers	7	18.9
Housewives	3	8.1
Educational Status		
Illiterate	4	10.8
Primary Level	15	40.5
Secondary Level	14	37.8
Post Secondary Level	4	10.8

Table-2: Percentage distribution of abortion provider and prior use of contraceptive

Abortion providers	**N**	**%**
Traditional Healers	2	5.4
Patent Medicine Store / Chemist Attendants	12	32.4
Clinic / Hospital	5	13.5
Medical Aid	12	32.4
Unspecified	6	16.2
Prior contraceptive use		
Regular use of contraceptive	2	5.4
Irregular use of contraceptive	7	18.9
No prior use of contraceptive	28	75.7
Not stated	2	5.4

Nearly half of the patients, 48.6% had drainage of abscess alone at laparatomy and 10.8% had some form of hysterectomy and drainage. Majority of the patient, 94.6% had blood transfusion before, during or after the surgery. The maternal death in this study was 18.9% and infection 57.1% ranked the highest cause of mortality. This is followed by renal failure 28.6% and anemia/hemorrhage in 14.3% of patients.

DISCUSSION

The World Health Organization estimates that nineteen out of every twenty unsafe abortion takes place in the less developed region of the world.[6] In addition, of every five women who had unsafe abortion, at least one suffers a reproductive tract infection as a result.[7] Adolescent's accounts for 24.3% in this study, this is considerably higher than the proportion of adolescent found in a study that evaluated the profile of women seeking abortion in Mozambique.[8] The high rate of adolescent in this study might not be unconnected to norms and taboos that are against discussing sexuality and contraception among the teenagers; thus posing a strong barrier to dissemination and acquisition of information, which would have helped in decreasing this menace called unsafe abortion.

Table-3: Clinical presentation of admission

Symptoms and signs	**N**	**%**
Fever >38 degree Celsius	34	91.8
Abdominal pain with or without distention	37	100
Vaginal discharge	33	89.2
Vaginal bleeding	18	48.6
Pelvic mass	35	94.6
Tetanus	1	2.7
Anemia	29	78.4
Diarrhoea	27	73.0

Table-4: Percentage distribution of type of surgery performed and the need for blood transfusion

Type of Surgery	**N**	**%**
Laparotomic drainage	18	48.6
Posterior colpotomy drainage	1	2.7
Laparotomic drainage and repair of uterus	8	21.6
Laparotomic drainage and subtotal hysterectomy	3	8.1
Laparotomic drainage and total hysterectomy	1	2.7
Laparotomic drainage and unilateral adenexectomy	6	16.2

Table-5: Causes of mortality recorded in the study

Causes of mortality	**N**	**%**
Infection	4	57.1
Anemia / hemorrhage shock	1	14.3
Renal failure	2	28.6

Maternal Death 18.7%

Notably, half of the patients had had no previous birth, which could be partly attributed to the percentage of adolescent in the study. Most of the adolescent had had no children. However, the finding is similar to the study that reported 50% to 80% of women who had clandestine abortion in some part of Africa were childless.[9] The relatively high percentage of women with five or more children in this study is striking; this might be a reflection of increasing socio-economic hardship in the country with resultant tendency to limit family size. This is in keeping with a study done in Bangladesh,[10] they reported the incidence of induced abortion was higher among women who had six or more births.

Overall, 75.7% were single and 62.2% were students, it is not a surprising finding because most studies in Sub-Saharan Africa reported a low incidence of induced abortion amongst married women.[9,11] Literacy level did not affect the women's

decision to procure abortion under an unsafe circumstance for various reasons, which range from the cost of the procedure to the accessibility of the service.

The abortion provider's were mainly untrained personnel with little or no formal knowledge of medicine. This is the consequence of restrictive abortion law that exists in Nigeria, which makes the procedure unavailable, unaffordable, unreachable or inaccessible to most women. The lack of separate reproductive health services to protect and meet the needs of our adolescent is contributory to the high patronage of untrained "abortionist". However, a similar study done in Lagos, Nigeria reported a comparatively high figure of trained personnel as abortion providers.[12] Also, noteworthy is the high figure of unspecified abortion providers; these might be due to high level of secrecy that surrounds the procurement of induced abortion in Sub-Saharan Africa.[11]

The low contraceptive prevalence rate in this study goes to explain the increase incidence of unintended pregnancy, which often ends in unsafe abortion. The sign and symptom complex at presentation are similar to other studies,[13,14] although vaginal bleeding has a higher percentage, in this series due to incomplete abortion and trauma to the uterus, as a complication of unsafe abortion.

Most of the patient had conservative surgery so as to give them a chance of future child bearing[15,16] considering that a good percentage of the women were single and childless. This was the basis and line of surgical management in another study.[13] Radical surgery in these patients, are known to be associated with more complications.[17] The maternal death of 18.9% recorded is similar to the abortion related maternal death reported in Lagos, Nigeria.[12] Infection in various forms was the leading cause of death.

Unsafe abortion and its complication is still a problem in Nigeria. These can be prevented by creating awareness; preventing unplanned pregnancies and provision of post abortion care, which entails provision of emergency treatment of abortion complications, family planning counseling and services. Post abortion care of high quality can save many lives,[18] thus reducing the maternal mortality and morbidity, from unsafe abortion and its complications.

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