
The Contribution of Unsafe Abortions to Gynaecological Emergencies and Mortality –Five Year Experience of Jos University Teaching Hospital, Nigeria

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Abstract

Context: Unsafe abortions remain a significant cause of maternal mortality and morbidity in Nigeria. They increase the burden on the already stretched health systems with majority coming in as emergencies and contribute to maternal morbidity and mortality. It is important to ascertain these contributions in order to prevent them.

Objectives: This study aims at reviewing the contributions of unsafe abortions to gynaecological emergencies, the pattern of terminations and complications, as well as morbidity and mortality among women in Jos University Teaching Hospital (JUTH).

Methodology: The 120 cases of unsafe abortions managed from January 2001 to December 2005 at the Jos University Teaching Hospital were reviewed. Information was retrieved from patients' case notes in the various gynaecological units as well as daily ward reports and analyzed using EPI Info statistical software version 3.3.

Results: Induced abortions contributed 4.8% of the 2,495 gynaecological emergencies and 12.64% maternal deaths; with the maternal mortality ratio being 891/100,000 live births.

The age range was 14 – 45 years, with the majority 33% (40) being adolescents. Singles contributed 70.8% (85), married 26.7 % (32), and separated/divorced 2.5 % (3). Parity range was 0 – 10, with 66.4% being nulliparous and 21.1% grand-multipara. At presentation, 26 (21.7%) denied termination of pregnancy. Modal gestational age was 13 weeks. Surgical termination occurred in 75 (62.8%) of patients. There were 51 abortions (42.5%) procured at private clinics and 28 (23.1%) at chemists and homes. Most of the patients 60.8% (73) were first timers. Most of the complications of induced abortion occurred in the first week and were mainly: incomplete abortion, septicemia, uterine perforation, acute renal failure, pelvic abscess and tetanus. Uterine evacuation was done for 47.8%, laparotomy for 17.5% and blood transfusion for 23.3% of the patients. Days on admission ranged from 0 – 64 days. The case fatality rate was 11.2% with 30.8% of the deaths attributed to the use of herbal concoctions.

Conclusion: The morbidity and mortality from unsafe abortions remains high. Adolescents contribute high numbers warranting programs for adolescent reproductive health services and improved contraceptive utilization.

Keywords: Abortions, unsafe, gynecological emergency, mortality, adolescent

1.Introduction

An unsafe abortion is defined by World Health Organization (WHO) as the procedure for termination of an unintended pregnancy carried out by individuals lacking the requisite skills or in an environment that does not conform to medical standards or both.[1] Unsafe abortions have been eliminated in developed countries, but still persist in

developing countries where it remains a major cause of morbidity and mortality due to the restrictive abortion laws in the background of unmet needs for contraception[1,2]. Abortion is a sensitive and contentious issue with religious, moral, cultural, and political dimensions. It is also a public health concern in many parts of the world. More than one-

quarter of the world's people live in countries where the procedure is prohibited or permitted only to save the woman's life. Yet, regardless of legal status, abortions still occur, and nearly half of them are unsafe.[2]

In many sub-Saharan African countries, including Nigeria, many women are unable to access safe abortion services for unwanted pregnancies on account of the abortion laws among others, and it is now widely accepted that restrictive abortion laws do not reduce the incidence of unsafe abortions but rather drive it to the background and increase morbidity and mortality[1-6]. Countries like Nigeria that have severe abortion laws have abortion rates that are among the highest worldwide.[4] Each year, hospitals around the country provide care to 142,000 women experiencing complications from abortion with reports of between 20,000 and 60,000 annual Mortalities. The illegality of the procedure with a 14-year jail sentence for both the provider and the patient drives them into the hands of quacks and other unskilled health professionals.[2,4] The World Health organization (WHO) indicates that in every eight minutes a woman from one of the developing Nations will die of complications of an unsafe abortion.[1] It is also known that women who live in countries where abortion has been legalized still patronize unskilled persons for termination of unplanned pregnancies because of other reasons including religion and social issues.[7] Getting accurate data for abortions and worse unsafe abortions is challenging as many countries still have very weak Data collection and Monitoring and Evaluation (M/E) systems.[8]

All over the world, women experience unplanned pregnancies and after intense consideration of their health, future and finances, they often choose to terminate such unwanted pregnancies. Every time a woman has to have a child when her body is no longer keen, she carries a major burden and death is often the consequence. In Nigeria, given the high poverty rates and the high maternal mortality rates, thousands of women each year choose to terminate pregnancies they do not want and is not in their best interest. Though data on unsafe abortions are incomplete because of the clandestine nature, this condition has been found to contribute up to 40% of Maternal Mortality figures in Nigeria.[4,6]

The rates are higher among adolescents, with decreasing age at sexual debut, increased rate of sexual activity, low socioeconomic status and low use of contraception among reasons for high rates of unwanted pregnancies.[10,11] These groups of people also do not have access to sexual and

reproductive health education and services including contraception.[4] Many countries have therefore made effort to look at the issues of adolescents' sexual and reproductive health as a National Issue[10].

Abortion in Nigeria is governed by two different laws. In Northern Nigeria, the Penal Code, Law No. 18 of 1959, is in effect, while in the south, it is the Criminal Code of 1916. Under the Penal Code, an abortion may be legally performed only to save the life of the pregnant woman. Except for this, a person who voluntarily causes a woman with child to miscarry is subject to up to fourteen years' imprisonment and/or payment of a fine. A woman who causes her own miscarriage is subject to the same penalty. Harsher penalties are applied if the woman dies as a result of the miscarriage.[12]

The Criminal Code, which is modelled on the English Offences against the Person Act of 1861, permits an abortion to be legally performed only to save the life of the woman. Section 297 provides that "a person is not criminally responsible for performing in good faith and with reasonable care and skill a surgical operation upon an unborn child for the preservation of the mother's life if the performance of the operation is reasonable, having regard to the patient's state at the time and all the circumstances of the case". Any person who, with intent to procure the miscarriage of a woman, unlawfully administers to her any noxious thing or uses any other means is subject to fourteen years' imprisonment. A woman who undertakes the same act with respect to herself or consents to it is subject to seven years' imprisonment. Any person who supplies anything knowing that it is intended to be unlawfully used to procure a miscarriage is subject to three years' imprisonment. Abortion is therefore allowed in Nigeria to save the life of the woman, to preserve physical and mental health, but not allowed for rape or incest, foetal impairment, economic or social reasons or on request. A 1982 attempt to liberalize abortion law in Nigeria was defeated. Two physicians are required to certify that the pregnancy poses a serious threat to the life of the woman.[12]

The Nigerian Demographic Health Survey (NDHS) of 2008 indicates there are high rates of teenage pregnancy and Contraceptive prevalence rates are low across all the zones in Nigeria although these are found to be worse in the Northern parts of the country.[11] The general fertility rate was 194 births for every 1,000 women, while crude birth rate was 40.6 per 1,000 women population. Rural areas have higher Total Fertility Rate than urban areas (6.3 compared with 4.7) with large urban-rural differences in age specific fertility rates, the largest

in age groups 15-19 and 20-24. In Nigeria, 9 percent of women age 25-49 have given birth by age 15, and 47 percent have become mothers by age 20. This however increases with education and improved socio economic status. The NDHS indicates Nigerian women have short birth intervals with 8 percent of births are less than 18 months apart and 24 percent have an interval of less than two years. Meanwhile only 29 percent of all women reported ever using a method of contraception at some time; 24 percent used a modern method and 13 percent used a traditional method. Ever use of a modern contraceptive method is 11 percent for women age 15-19, increasing sharply with increasing age to reach a peak of 36 percent among women age 30-39 and demonstrates the gaps in the adolescent age group.

All of these are pointers to low contraceptive use which is a major factor in the background of low socioeconomic status that contributes to unplanned pregnancies and subsequently the procurement of unsafe abortions by women.

This study aims at assessing the contribution of unsafe abortions to gynaecological emergencies, the pattern of terminations and complications, as well as morbidity and mortality among women in Jos.

2. Participants and Methods

This was a retrospective study of 120 cases of unsafe abortions, among women aged 14-49 years, managed from January 2001 to December 2005 at the Obstetrics and Gynaecology Department of the Jos University Teaching Hospital. The hospital receives referrals from primary, secondary, private and faith-based facilities in and around Plateau state.

The patients information were retrieved from the patients' case notes in the gynaecological emergency ward, intensive care unit, gynaecological theatres and daily ward reports. These were captured and analyzed with the EPI Info statistical software version 3.3.

The demographic characteristics or the patients, gestational ages at termination, methods of procurement, venue, agents utilized, complications encountered and services that were provided for the patients were assessed. The number of times unsafe abortions had been procured was ascertained as well as characteristics of procurer and the venue. Interventions provided to the patients including resuscitation, uterine evacuations, blood transfusions, Multi-disciplinary approach, use of antibiotics, anti-tetanus, as well as duration of hospital stay,

complications encountered and its contribution to mortality rates were also determined.

3. Results

3.1 Sociodemographic Characteristics

The age range was 14 – 45 years with mean age of 23.4 years, median age of 22 years, and modal age being 18 years. The 14 year old was a school girl while the 45 year old was a grandmother already

Table 1: Sociodemographic Characteristics of Patients (n=120)

Variables	Frequency	Percent
Age		
Adolescence (10-19 years)	40	33.3
20- 29 years	35	29.2
30- 39 years	31	25.8
40- 49 years	14	11.7
Marital Status		
Single	85	70.8
Married	32	26.7
Separated/Divorced	3	2.5
Occupation		
Students	58	48.6
Housewives	26	21.6
Applicants	14	11.3
Others	22	18.5
Religion		
Christians	105	87.5
Muslims	15	12.5
Parity		
Para 0	79	66.4
Para 1	17	14.3
Para 2-4	13	9.3
Grand multiparous	12	10.1
Denial of TOP		
Declared	94	78.3
Denied	26	21.7

A total of 40 adolescents (Age 10 to 19 years) were identified, thus contributing 33.3% of the population. Among them, five were children of various categories of hospital health workers whose parents only became aware of pregnancies and procurements of termination of pregnancies when complications that warranted rushing them to hospital arose.

Single women contributed 70.8% while the married were 26.7%. The separated/divorced contributed 2.5%. Students of mainly secondary and tertiary institutions contributed 48.6%, while housewives made up 21.6% and applicants were 11.3%. The remainder included civil servants, apprentices, house maids, teachers, applicants, policewomen, farmers and cleaners in varying percentages. Majority of the women were Christians, who made up 87.5% while Muslims were 12.5%. (Table 1).

The range of parity was 0 – 10, with 66.4% of the patients being nulliparous while 10.1% were

grand multipara. At the point of presentation in the hospital, and obtaining needful history, a total 21.7% of the women did not volunteer history of termination of pregnancy and as well denied when asked. This was only refuted at subsequent review by other members of the health team or information from relations/friends as well as physical examination findings. Among those that denied the termination, 25% of them were married women, 18.8% were singles and 66.7% of them were separated or divorced.

3.2. Pattern of Terminations

The gestational age at termination ranged from 5 – 26 weeks, with modal age of 13 weeks in 23.1% of the women. (Table 2)

Table 2: Pattern of unsafe abortions

Variable	Frequency	Percentage
Previous Terminations		
Procured	73	60.8
0	31	25.8
1	11	9.2
2	4	3.3
3	0	0
4	1	0.8
5		
Method		
Surgical	75	62.8
Medical	17	14.2
Combined Medical/Surgical	15	12.4
Herbal Medications	13	10.6
Location		
Private Clinic	51	42.5
Chemist	28	23.1
Home	28	23.1
Others	13	11.3
Declared committing TOP*		
Declared	94	78.3
Denied	26	21.7

*TOP – Termination of Pregnancy

Surgical termination was the most frequently used method and was the modality of procurement in 62.8% of the patients. Various surgical materials including Manual vacuum aspiration, dilators and curettes, scissors, surgical instruments, metal objects and hangers were used in the process. Medical terminations (inclusive of oxytocin, ergometrine and various types of injections, alcohol overdose, quinine and chloroquine tablets) were used in 14.2% of the patients that were reviewed. Combinations of medical and surgical methods were used in 12.4% of the patients and this was done either at the same time or with supposed failure of one method. Herbal concoctions also featured as a means of procuring abortions and this was what was utilized in 10.6% of the women. Different types of herbal combinations were ingested and inserted into the vagina by this group of patients. Some of them were sourced by the patients

themselves, while others were provided by herbalists, relatives, friends, spouses and school mates. A total 42.5% procured termination of pregnancy in private clinics, while 23.1% were procured at chemists/drug shops and another 23.1% at homes of either the health worker or the home of the client. In all the cases, they reverted to the hospitals when complications arose and these were mainly continual bleeding, features of sepsis (abdominal pain and fever), discoloration of the eyes and collapse among others.

Table 3- Parity distribution of procurers

Parity	Number	Percentage
0	79	66.4
1	17	14.3
2	4	3.4
3	3	2.5
4	4	3.4
5	3	2.5
6	4	3.4
7	2	1.7
10	3	2.5
TOTAL	120	100

Table 4: Numbers of previous termination of pregnancy

Parity	Number	percentage
0	79	66.4
1	17	14.3
2	4	3.4
3	3	2.5
4	4	3.4
5	3	2.5
6	4	3.4
7	2	1.7
10	3	2.5
TOTAL	120	100

3.3 Interventions provided

The Interventions that were provided at presentation in JUTH included varying degrees of resuscitation of all the patients. Blood transfusion was required and provided in 23.3% of the cases, though 46.7% were found to have varying degrees of anaemia on presentation. All the patients were given broad spectrum antibiotics to cover for gram and anaerobic organisms as well. They all received tetanus toxoid for prophylaxis and others received anti tetanus serum in addition. Uterine evacuation was indicated and carried out in 47.8% of the patients and laparotomy was performed in 17.5% of cases on account of varying degrees of uterine, bowel, vascular and visceral injuries.

Multidisciplinary approach was indicated and instituted in more than 53% of the patients that were managed for unsafe abortions. The varying

complications found to have occurred that warranted involvement and inputs of Surgeons (Bowel), Nephrologists, Anaesthetists, Paediatricians, Haematologists, Chemical Pathologists, general physicians, laboratory physicians and psychiatrists. These had to handle severe complications including bowel perforations, acute renal and hepatic failure, septicemia, varying degrees of unconsciousness, encephalopathy from herbal ingestions, Disseminated Intravascular Coagulopathy (DIC) and neuropsychiatric manifestations among others. The Paediatricians were called to review the girls that were aged less than 14 years old especially when they didn't disclose the history of termination of pregnancy.

The number of days spent on admission ranged from 0 – 64 days in total, with 107 (88.8%) of them improved and discharged from the hospital. Duration of hospital stay was shorter were manual vacuum aspiration was used for evacuation in absence of other complications with about half (52%) being discharged within 48 hours.

From review of the case notes, reasons that were proffered for terminating the pregnancy included being in school and the fear of parents reactions by adolescents and younger/single women. While the married women and multipara indicated they already had too many children or they were nursing babies, while pregnancies resulting from extra marital affairs were also given as reasons in some of the cases.

While evaluating the women that had attempted termination of supposed intrauterine pregnancies, four were assessed to rather have had ruptured ectopic pregnancies rather than intrauterine pregnancies they had been trying to terminate. All four of them were resuscitated and taken to theatre for laparotomy and salpingectomy.

In spite of efforts by the health team, a total 13 of these patients (11.2%) died from various complications and were included in the Maternal Mortality numbers of the facility. The mortalities that followed unsafe terminations of pregnancies contributed 12.64% of the maternal mortality ratio of 891/100,000 births during the period under review. Mortality was also reasonably high in the women that had used herbal concoctions where 30.8% of these patients died in the hospital. In all of the cases of herbal use, morbidity and mortality followed hepatic and renal toxicity from the agents as well as sepsis/septicemia from retained products of conception. Many of those, that ingested and or inserted herbal medications and had complications like severe vulvar oedema, altered sensorium from

encephalopathy and sepsis that posed challenges of evacuation of the uterus.

All the survivors received contraceptive and safe sex counselling from the Family Planning Unit Nurses of the hospital before they were discharged from the Hospital.

4. Complications

Most of the observed complications occurred and presented within the first week of procuring the abortion (38.9%). The commonest complication observed in about 94% was incomplete abortion. However hemorrhage, septicemia, uterine perforation, acute renal failure, pelvic abscess and anaemia also featured in varying percentages either individually or collectively. Rarer but more severe complications that were observed (in about 7%) included tetanus, psychosis, disseminated intravascular coagulopathy, hepatic encephalopathy and anaemic heart failure.

Mortality was highest among women who were procuring abortions for the first who contributed 69.2% of deaths, while none of the women who were procuring the third and higher order terminations died. Others associations included age with 18 year old women contributed 30.8% of mortality, 53.8% of deaths were married women, 90.1% of those that died were terminating pregnancy beyond 12 weeks, 30.8% of them used herbal medications, 66.7% of deaths procured in homes and chemists as against those who went to private clinics. Hypovolaemia and shock was contributory to death in 92.3% and all of those that had complications of Tetanus, encephalopathy, Disseminated Intravascular Coagulopathy and Acute renal failure did not survive. It was observed that 83.7% of total deaths occurred within 24 hours of terminating pregnancy.

Among the patients who turned up for their follow up visits, late sequelae like Asherman's syndrome in 3.33% (4 patients), acquired gynaetresia with cryptomenorrhoea in 2 Patients (1.67%) were encountered.

Induced abortions that presented at the JUTH contributed 4.8% of the 2,495 gynaecological emergencies managed during the period under review, all of which were procured outside JUTH and complicated in varying degrees of severity. Complications prompted presentation to JUTH. The cases of unsafe abortion managed contributed 12.64% of the maternal mortality ratio of 891/100,000 births during the period under review

5. Discussions

This study revealed that 4.8% of the 2,495 gynaecological emergencies managed during the period under review, all of which were procured outside JUTH and complicated in varying degrees of severity. The cases of unsafe abortion managed contributed 12.64% of the maternal mortality ratio of 891/100,000 births during the period under review and indicate that unsafe abortions are still on going underground and increase burden on the health system. This agrees with reports that in developing nations like Africa, 55% are unsafe in comparison to developed countries where only 3% of abortions are unsafe.[1-5,7] The study also showed that all categories of ages are involved including a 14 year old school girl and a 45 year old grandmother at the extremes. The fact that all categories of women ages are involved in the performance of unsafe abortions has been documented by the with the Guttmacher institute who also estimated that over 222 million women with contraception unmet needs put themselves at risk for unintended pregnancy and unsafe abortion.

The study showed that all the abortions were unsafe and came to JUTH on account of complications. Given the restrictive abortion laws, poverty, conflict, low levels of education of the girl child, sparse adolescent reproductive health services and low contraceptive utilization rates in Nigeria, unplanned pregnancies and unsafe abortions with associated morbidity and mortality continue to be high.[4,7] as observed in this study and have been identified as the missing link in efforts at improving maternal health.[5]

Reviewing the socio demographic parameters, unsafe abortions were found to be higher among students (48.6%), single ladies (70.8%), women were becoming pregnant for the first time and were procuring abortions for the first time (66.4%) and teenagers/adolescents with 33.3% contribution. This is similar to what was observed in a study in Zambia which revealed that women presenting at University Teaching Hospital with complications from unsafe abortion generally were 15–19 years old (60%), had some secondary education (55%), were unmarried (60%), had had no previous pregnancies (63%) and were students who wanted to continue their education (81%)[14] The challenge therefore cuts across various African Countries.

Mortality in JUTH was however highest among women who were procuring abortions for the first time who contributed 69.2% while none of the women who were procuring the third and higher order terminations died. Students contributed 33.3%

to mortality and many of these first timers and students were adolescents. Hospital records in many developing countries suggest 38-68 percent of women treated for complications of abortion are below 20 years of age and 13-60 percent of all maternal deaths are due to unsafe abortion. Adolescents are more likely than adults to experience unintended pregnancies during their first year of contraceptive use due to poor knowledge and skill. They are more likely than adults to delay abortion, resort to unskilled persons, to use dangerous methods and to delay seeking care when complications arise. Adolescents are more likely to experience complications like hemorrhage, septicemia, internal organ damage, tetanus, sterility, and death.[15-17] It was observed that all of those who had tetanus, renal failure, DIC and encephalopathy in this study ended as mortalities.

In Malawi, Uganda and Zambia, adolescents represent one-fourth to one-third of patients suffering from complications, and in Kenya and Nigeria, more than half of women with the most severe complications are adolescents.[16]

Another study showed 43.6% procurers of unsafe abortions were less than 17 years old, 80.1% aged 17-19 years were sexually active and at least 24.1% had undergone an induced abortion while only 5.3% had ever used a modern contraceptive.[18] Fear of future infertility was found to be an overriding factor in adolescents' decisions to rely on induced abortion rather than contraception. While engaging adolescents in focus-group discussions, they perceived that adverse effects of modern contraceptives on fertility were continuous and prolonged but saw abortion as an immediate solution to an unplanned pregnancy and one that would have a limited negative impact on future fertility.[19] In this study the 18 year old women contributed 30.8% mortality. This draws attention to gaps in Sexual and Reproductive Health (SRH) needs of Adolescents and Young People as a focus in prevention of unsafe abortions.

Married women are also involved and constitute 26.7% of the patients in this study; however they contributed 53.8% of mortalities. This indicates high unmet contraception need among the married.

Abortifacients used by clients in this study were found to be medical (Drugs like Chloroquine, Quinine, Ergometrine, Oxytocin), surgical methods included use of sharp objects, MVA, Dilators, Curettes and scissors, as well as herbal concoctions. These are similar to what is used in other developing countries where toxic solutions, herbal remedies, antimalarials and uterotonic agents are used. Also

objects and chemicals including potash, potassium permanganate have been placed in the vagina, enemas, abdominal trauma, insertion of sharp objects, knitting pins and pens have been used by the patients to terminate pregnancies.[20] The use of sharp instruments was associated with uterine and bowel injuries as well as tetanus in some cases. These all increased morbidity and mortality in this study as well.

The role of herbal preparations is of worthwhile note where 30.8 % of those who used them ended as mortalities due to hepato and nephrotoxicity of the preparations as well as septic incomplete abortion. Data is sparse about the use and effects of herbal medications in procurement of abortions. There will be need to study more on the role of herbal preparations in contribution to mortality in unsafe abortions considering the percentage that died.

In this study, 66.7% of deaths procured in homes and chemists ended as mortalities as against those who went to private clinics. Studies have found that women terminated pregnancies at homes, chemists and private hospitals. Some are carried out by the patients themselves, friends, schoolmates, partners, family members among others. This obtains in other studies as well[20], and calls for health education and in-cooperation of SRH into curricular of schools.

The complications of unsafe abortions encountered here are same as characteristically observed in other studies and include incomplete abortion, sepsis, haemorrhage and more severe ones which are responsible for mortality are tetanus, septic shock, acute renal failure and bowel injury[21], Hypovolaemia and shock was contributory to death in 92.3% in this study and also increased morbidity and hospital stay among survivors. There were also long term morbidities that were immediately obvious like acquired gynaetresia and secondary amenorrhoea from Asherman's syndrome encountered in some of the patients.[22] Others like infertility and chronic pelvic pain were not documented because of poor follow up rates.

Unsafe abortion therefore remains a major cause of maternal mortality and severe morbidity in countries with restrictive abortion laws like Nigeria which require review. A study targeting 49 Nigerian policy makers/politicians observed poor knowledge about burden of unsafe abortion in Nigeria, the contributory factors, the abortion laws and details of abortion-related deaths encountered in Nigeria. The policymakers were guided by moral and religious considerations rather than evidence-based approaches to critical health issues. About one-third

of them felt that abortion should not be legal under any circumstances, one-fifth supported liberalization on medical grounds and a similar proportion believed that abortion should be legal in cases of rape and incest. Strategies recommended by respondents to reduce maternal mortality included facilitating access to contraceptives, providing sexuality education, improving the health care system, empowering women and providing free pregnancy care.[23]

Alan Guttmacher, the famous warrior for women's health, said in November 1973 "those who oppose and those who favor legalization of abortion share a common goal—the elimination of all abortion." Medical abortion, while a human right, is the worst choice for a bad situation. An age long method of fertility control that continues to be practiced in all continents and by all people, and invokes sensitive social, medical, political, religious, legal, ethical and public health concerns. Restrictive abortion laws do not reduce the incidence of induced abortions but have driven it underground. Helping a woman prevent, not abort a pregnancy she does not want, is in the best interest of she and her family. By the time a woman chooses to abort, the health system of her country has already failed her and in Nigeria's case the health system fails 610,000 times every year with great implications.[10]

Access to contraceptives can lower Nigeria's high maternal mortality, prevent unintended pregnancies, unsafe abortions, and HIV/AIDs, and may result in 50% decrease in infant deaths. If there is one thing that could serve as a single silver bullet for prosperity and societal wellbeing, it is giving all women the right and access to the range of sexual reproductive health services there are. Nigerian women in the range of 16 million, located in both of rural and urban areas, want access to contraceptives but because of inefficiencies of the health system, they lack access and are forced to have children neither want nor can afford. This constitutes an unmet need which measures the number of women who do not want more children, want to space their children, or want to postpone their next child, but are not using modern contraceptives. The National Demographic and Health Survey (NDHS) indicates that 20% of Nigerian women had an unmet contraceptive need.

In 2007, the International Federation of Gynecology and Obstetrics (FIGO) created a Working Group on the Prevention of Unsafe Abortion and its Consequences (WGPIA) which has recommended that plans of action of countries participating in the initiative consider several levels of prevention shown to have the potential to successfully reduce unsafe abortions.[22]

A comprehensive prevention plan can be stratified into Primary prevention of unintended pregnancy and induced abortion by providing effective contraception to women who want to prevent pregnancy. This can only occur with scale up, infrastructure upgrade, closing capacity and logistics gaps and health education. Secondary prevention to ensure the safety of an abortion procedure that could not be avoided. This entails training of health care workers at all levels and provision of equipment and drugs. Tertiary prevention of further complications of an unsafe abortion procedure that has taken place already, through high-quality post abortion care to reduce morbidity and mortality. Quaternary prevention of repeated abortion procedures through post abortion family planning counseling and contraceptive services.[22] This strategy will reduce morbidity and mortality which remains high and constitute major social and financial costs to women, families, communities and health systems. In 2006, it was estimated that \$680 million was spent treating serious consequences of unsafe abortion while \$370 million would be required to fully meet unmet needs for treating unsafe abortion complications. [27]

This study revealed that 83.7% of total deaths occurred within 24 hours of terminating pregnancy and is a call that health workers should be very proactive in provision of secondary and tertiary prevention services to women who are referred on account of unsafe abortions in order to reduce mortality. Moreso 90.1% of those that died were terminating pregnancies that were beyond 12 weeks.

The 1994 International Conference on Population and Development (ICPD) highlighted need for governments “to deal with the health impact of unsafe abortion as a major public health concern and reduce abortion recourse through expanded and improved family planning services”[21]. Improving adolescent RH services, expanding access and reducing contraception unmet, rather than restricting abortion, will ultimately save women’s lives, and alongside empowering women and adolescents as change agents, holding governments accountable and strengthening health systems for sustainability is the way forward.[24] Adolescent evaluations show that education, schooling attitudes as related to condoms, contraception, perceived sexual behavior of friends, partner approval for contraception are risk and protective factors and should be addressed[25] A Marie Stopes worker wrote that during a trip to Nigeria she met 70 women who travelled overnight to reach the clinic where they can access family planning services.[26] This gap features all

over the country and must be closed to win the battle against unsafe abortions.

6. Conclusions

The morbidity and mortality from unsafe abortion remains high with adolescents contributing high numbers warranting programs for adolescent reproductive health services.

Intense public health education and advocacy targeting policymakers is needed to increase political will for reducing abortion-related maternal deaths in Nigeria by presenting statistics on unsafe abortion to policy makers regarding abortion law reform. Governments and civil society must help adolescents prevent unwanted pregnancy by making available information and education, counseling, and contraceptive services and commodities including emergency contraception - that are appropriate to their needs. Train and equip health-service providers to manage the complications of unsafe abortions and to provide services that are “adolescent-friendly. They should enact and strengthen laws and establish policies to protect health care providers who care for adolescents; review laws containing punitive measures against women who have undergone illegal abortions, as well as health professionals who provide them, and develop a legal framework that includes the particular needs of adolescents.

7. Recommendations

The establishment of the Institute of Reproductive Health in the country as proposed by SOGON will also have a role in reduction of unsafe abortions. However while we await some of these long term primary preventive measures, health care providers especially Gynaecologists have to be equipped with essential obstetric care materials and be very proactive in managing cases in order to reduce morbidity and mortality from unsafe abortions in the West African Sub Region as secondary and tertiary preventive measures.

There will be need to study more on the role of herbal preparations in contribution to mortality in unsafe abortions considering the percentage that died.

Acknowledgements

The Doctors, Nurses, social workers and counsellors from all the departments that co-managed the patients including Anaesthesia, Paediatrics, Surgeons, Chemical Pathology departments, haematologists, Records and all units involved in patient management.

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