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Prevention of morbidity and mortality from induced and unsafe abortion in Nigeria

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Critical Issues in Reproductive Health

*Prevention of Morbidity and Mortality from
Induced and Unsafe
Abortion in Nigeria*

**PREVENTION OF MORBIDITY AND MORTALITY FROM INDUCED AND UNSAFE
ABORTION IN NIGERIA**

Proceedings of a seminar organised by the Department of Obstetrics Gynaecology and Perinatology,
Obafemi Awolowo University, Ile-Ife (Nigeria),

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EXECUTIVE SUMMARY

Purpose: The primary purpose of the multidisciplinary seminar was to identify the determinants of the high rate of mortality and morbidity from unsafe abortion in Nigeria. The specific objectives were (1) to identify measures that could be undertaken on a short and long term basis to reduce the rate of abortion-related mortality and (2) to set an agenda for research into abortion in Nigeria.

Methodology: The seminar consisted of oral presentations on related topics by researchers and women's health advocates, indepth formal and informal discussions of the issues by the participants and a workshop session.

Recommendations: Based on the discussions, we make the following recommendations:

(1) **Overall Strategy:** It is important to sensitize the Nigerian public to the high rate of mortality from induced abortion. Knowledgeable health practitioners should use every available opportunity to report cases of deaths from induced abortion and emphasise the need for the government and individuals to take action to correct the situation. Special influential pressure groups such as the Press, Politicians, women organisations and community leaders should particularly be targetted to receive such information.

(2) **Abortion Law:** The participants agreed that it was necessary to liberalise the abortion law in the country for the following reasons: (1) to prevent women from using unsafe and dangerous methods of pregnancy termination, (2) so that facilities and training in safe abortion methods can be provided in government hospitals and (3) to create a climate under which reproductive health information and contraception can be provided to a broad segment of women.

Actions which could accelerate the process of liberalising the abortion law in Nigeria include:

- * Meeting with special interest groups - women organisation, community leaders, religious leaders and members of the Press - independently or in groups, to convince them on the necessity to liberalise the abortion law.

- * Organising women groups - to be in the forefront of those campaigning to liberalise the law.

- * Partial liberalisation - to encourage the government to first increase the range of situations under which abortion could be performed. This may be more acceptable to a wide spectrum of the Nigerian public and could allow for improvement in abortion care facilities in government hospitals.

While abortion is still illegal in Nigeria, the following programs were recognised by the participants as capable of reducing the number of unwanted pregnancies and the deaths due to abortion.

(3) **Improvement of Post-abortion Care:** Programs which are important in this area include:

- * Health education of women - to increase the early use of hospitals in cases of botched abortion.
- * Training of primary health care workers - to recognise the symptoms and signs of induced abortion, institute appropriate treatment and refer seriously ill patients to higher levels of care.
- * Training and retraining of medical practitioners in the use of the Manual Vacuum Aspirator (MVA) for the management of incomplete abortion. The curriculum of medical schools should include training of medical students in MVA technique.
- * Provision of contraception and counselling to women treated for complications of botched abortion - to reduce the rate of repeat abortions in the country.
- * Improving the availability of blood and blood products, intravenous fluids and antibiotics in government hospitals.

(4) **Primary Prevention of Unwanted Pregnancies:** Programs which could reduce the rate of unwanted pregnancies in Nigeria were identified to be:

- * The provision of reproductive health information in schools.
- * The provision of contraceptives and counselling to adolescents using formal methods and such informal channels as peer counsellors, school clinics, youth club clinics and evening clinics.

(5) **Research Agenda:** The participants recommended the following agenda for research into abortion in Nigeria.

* They agreed that a multi-institutional and multi-disciplinary research to estimate the prevalence and the determinants of induced abortion in Nigeria and the true rates of abortion complications would be an important research endeavour. The data could be used to formulate policies on abortion and provide a baseline for monitoring changes in abortion morbidity and mortality in Nigeria.

* A study that would estimate the cost of illegal abortions in Nigeria would be useful for health planning.

* A study of the attitude of professionals towards induced abortion would be important. It could be useful in devising an alternative strategy for improving access to safe abortion to women with unwanted pregnancies. The attitude of other groups - women, health professionals, adults, adolescents - towards abortion and the abortion law would be necessary to investigate and the results could be used to lobby for changes in the law.

* It would be necessary to use both qualitative and quantitative research methods to determine the abortion seeking behaviour of women. Issues to be covered by such research include the characteristics of women seeking abortion, the nature of the available clandestine abortion methods and services and the processes that lead women to seek particular methods of abortion. Such research could be used to devise an intervention that will break the cycle at the point where dangerous abortion methods are used.

* Research is needed that will investigate the socio-cultural context of unwanted pregnancies in Nigeria. Particular research is needed in such issues as (i) the determinants of teenage sexuality and pregnancy, (ii) extramarital sexual relations, and (iii) barriers to use of contraceptives in high risk

groups.

BACKGROUND TO THE SEMINAR

Abortion is presently regarded as a major cause of social and clinical problems in Nigeria. The law on abortion is still restrictive and does not permit termination of pregnancy except when it is needed to save the life of the woman. The consequence has been that women resort to abortion in clandestine places, leading to an astronomical increase in abortion-related maternal morbidity and mortality in the country. Of the estimated 50,000 maternal deaths that are known to occur in Nigeria annually, nearly 20,000 are attributable to complications of unsafe and induced abortion. Abortion is also thought to be responsible for long term morbidity in women including infertility, chronic pelvic pain, recurrent spontaneous abortion and ectopic pregnancy.

It is paradoxical that despite the severe health problems caused by unsafe abortion, nothing has been done at an organised

level to reverse the trend. There are some efforts by government and non-governmental organizations to increase women's use of contraceptives but these methods remain unavailable to women who require it most to prevent a need for pregnancy termination e.g. never-married adolescents. There is also no reproductive health education to the vast majority of at-risk groups and no clear policy exists on how to counsel women with unwanted pregnancies.

To address these issues, a seminar was held under the auspices of the Population Council at the Obafemi Awolowo University, Ile-Ife, Nigeria during December 4 - 6, 1991. The seminar was held to generate discussion on abortion, examine the present state of knowledge on the causes of abortion-related morbidity and mortality in Nigeria and to suggest ways to reduce the associated problems. The specific objectives of the seminar were to :

- review the epidemiology, causes and the biosocial consequences of induced abortion in Nigeria;
- describe the nature of abortion services in Nigeria;
- produce an agenda for research into abortion in Nigeria;
- recommend specific actions that can be undertaken on a short or long term basis to reduce the rate of morbidity and mortality from induced abortion in Nigeria.

The meeting turned out to be well timed as it coincided with the period when it became obvious that the Federal Government of Nigeria was becoming worried about the high rates of deaths from unsafe abortion and was planning to do something about it. During the 37th Meeting of the National Council of Health held in Lagos from 28th October to 1st November 1991, the Honorable Minister of Health, Professor O. Ransome-Kuti, made the following statement:

"... Again and again I have tried to correct statements attributed to me concerning abortion, but the campaign based on false reports continues. I did not say that this Government proposes to use abortion as a method for reducing population. Our Population Policy does not say so neither did anyone connected with this administration. I also did not say that we intend to legalize abortion or made any proposal to do so. My argument goes thus : Nigeria has the second highest maternal mortality rate in the World. Of all maternal deaths, 50% occur as a result of criminal abortions; particularly in teenagers and young women.

Teenagers are not given effective sex education - What they probably get is moral instruction which does not go to the heart of the matter, nor does it suppress the strong and violent sexual urge experienced at that vigorous age. We prevent them from gaining access to contraceptives because we believe it will promote promiscuity among them, yet we permit boys and girls to mix freely. When they eventually get pregnant, and they do not want the child, our laws drive them to have illegal abortions (which) often damage or kill them. I said we cannot as a nation continue to permit these deaths to continue; we must therefore intensify relevant sex education in schools, permit teenagers to have access to contraceptives and if and when they do not want a pregnancy, the laws should be changed to permit safe abortion. Many are concerned about the death of the unborn child, I would also like some concern to be shown for the mothers already born who are dying due to criminal abortions....."

Thus, it was clear that the issue was beginning to occupy center stage in State policy and it was not surprising that the Minister showed more than enough interest in the Ile-Ife seminar. Unfortunately, he could not attend the seminar because of another important Meeting in Accra, Ghana but he was represented by the Director of Hospital Services and Training in the Federal Ministry of Health, Dr. Chiori.

A major setback of the seminar was its unexpected postponement, from late November to early December, due to a national census which was suddenly announced for late November. As a consequence, several international and some local invitee who had already accepted to participate, could no longer attend.

However, we were still able to obtain a participant list of 40, made up of individuals with proven interest in Safe Motherhood, family planning and Women's health. Among the participants were persons with expertise in demography, community medicine, obstetrics and gynaecology, nursing, psychology, law, sociology, anthropology and philosophy. There were two community leaders, two leaders of women organizations, three representatives of the media, three representatives of non-governmental organizations, two policy-makers and six general medical practitioners. Several medical students, teenagers and resident doctors participated as observers. (A participant list is included at the end of this report).

The seminar was declared open by Professor Kayode A. Adetugbo, Dean of the Faculty of Health Sciences, Obafemi Awolowo University acting on behalf of the Vice-Chancellor of the University. Professor Adetugbo's opening address drew the attention of participants to the resurgence and current prominence of the debate on abortion both nationally and internationally. He urged participants at the seminar to come up with recommendations that would assist the government in formulating its policy on abortion. He noted the paucity of figures on the incidence of abortion in Nigeria in spite of the fact that such statistics are vital for meaningful discussions on the issue. He also observed that there is a need for counselling adolescents on the dangers of unsafe abortion. Professor Adetugbo wished the participants fruitful deliberations on this very important subject.

The agenda defined three themes - Realities of abortion in Nigeria; Unwanted pregnancy: understanding the issue and Setting the agenda for research and interventions - on which both women's health advocates and scientists were invited to make oral presentations. Each presentation was followed by spirited and exhaustive discussion during which participants described their experiences and views, which were often quite divergent. Following plenary discussions of these issues, the participants worked in groups to develop recommendations under the sub-themes of: 1) Epidemiology and clinical complications of unsafe and induced abortion; 2) Current service delivery mechanisms and proposed alternatives to improve abortion and reproductive health for women; 3) Social context of unwanted pregnancy and abortion; and 4) Strategies to foster change in policy and the law.

The recommendations were then discussed and agreed upon in a final plenary session.

This report is a synthesis of the presentations and the discussions at the seminar. The report

is organised into three chapters corresponding to the three themes mentioned above. Each chapter includes the presentations and the summaries of the discussions that followed. The final recommendations and a research agenda are presented at the end.

We have tried to report events in the seminar in great detail because of the realization that data on induced abortion in African countries, particularly in those with restrictive abortion laws, are very limited. It is hoped that the figures contained therein, will assist researchers interested in the topic, as well as government and non-governmental organizations who are daily faced with the task of formulating policies to improve maternal health in these countries.

FOREWORD: INDUCED ABORTION IN NIGERIA

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Discussions about induced abortion evoke a variety of responses. Some focus on technical questions about safety and efficacy of the various methods - medical and surgical, of inducing abortion; or on the short-term and long-term effects on the health of the patients. Induced abortions also raise serious moral and ethical issues, the main dilemma being the conflicting interests of the mothers and their unborn babies. Linked to the moral issues is the question of human rights,

specifically the pregnant woman's right to privacy in making decisions about her own body and the foetus right to life. There are no simple answers to these questions, but whilst the debate and discussions go on, there is the mounting toll of women dying from the complications of mis-managed abortions.

The factors determining the frequency of induced abortions and the incidence of complications and deaths associated with them vary from place to place. Hence, it is not possible to define a single strategy that can be applied universally to deal with the problem. Noting that the demand for induced abortions is an indication of the frequency of unwanted pregnancies, the prevention of unplanned pregnancies is recognized as an important element in the strategy for reducing the frequency of abortions. It would be inappropriate to focus too narrowly on the question of abortion as an isolated issue, but it should be viewed more widely in the context of social, economic, and political factors. Those who are concerned about morbidity and mortality from induced abortions, must consider patterns of sexual behaviour, in particular, precocious sexually activity among young persons, and other forms of sexual behaviour that are judged to be inappropriate within the society and could lead to unwanted pregnancies.

Similarly, discussions about the prevention of unwanted pregnancies should not be narrowly construed in terms of contraceptive devices but should include the promotion of a wide variety of options for preventing unwanted pregnancies including sexual abstinence.

It is often stated that once a woman decides to obtain an abortion, she would achieve this goal even at the cost of her life. If this notion is accepted, it is vitally important to make safe abortions widely available, to ensure that women do not die in the process of seeking abortions.

In many parts of the world, governments and communities are wrestling with the question about "Abortion and the Law." The legal position about induced abortions in Nigeria is a relic of its colonial past, compounded by the conservative views of the leadership of some influential women's organizations. Even though, Great Britain, the former colonial master, modernized its abortion law, the Nigerian law makers have so far, not attempted to follow suit. The debate is somewhat confused by the choice of words. Those who are opposed to induction of abortion, regard the "legalization" of abortion as being equivalent to official approval, condonation and endorsement of the procedure. Maybe the debate would be clarified if the issue were defined in terms of "decriminalization" of the procedure. The latter does not imply approval or disapproval of the procedure but merely states that, as with other medical or surgical procedures, the government does not attach a criminal status to the act in itself. Criminal charges could arise, as in other treatments, only if there is evidence of wrongdoing in relation to the procedure.

The papers published in this book present and analyze the problem of induced abortion in Nigeria. The formal presentations and the summaries of the discussions are important contribution to the understanding of the problem in this country. Many of the issues raised, equally apply to other countries in sub-Saharan Africa. This multidisciplinary analysis of the Nigerian case should stimulate further discussion of this important subject and should guide the development of policies and strategies for dealing with the problem.

CHAPTER 1 : REALITIES OF ABORTION IN NIGERIA

EPIDEMIOLOGY OF UNSAFE ABORTION

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It is not often that the organizers of a seminar take pains to indicate what roles they would like participants to play. This seminar on induced abortion in Nigeria seems to be one occasion in which stringent efforts were made to get presenters to understand what was expected of them. In my letter of invitation to deliver a paper at this seminar, my brief was stated as " to make a 45 minute presentation on the Epidemiology of Abortion" and, as if realizing that a sharper focus was required, the latter concluded that my presentation should include :

- " - review of the literature on abortion in Nigeria
- maternal mortality due to abortion globally, in Africa, in Nigeria
- maternal morbidity, especially problems of chronic infection and infertility".

I intend to abide by these instructions and I thank the organizers for making my task slightly less irksome than it would have been had I not been given such clear guidelines. In reviewing the literature on abortion in Nigeria, I will indicate the part of Nigeria from which the literature emanated. I will utilize published and unpublished data to highlight the main epidemiological information on induced abortion in Nigeria. With respect to maternal mortality, I will draw attention to the contributions that abortion-related deaths make to overall maternal deaths in the geographical areas stated and I shall also examine the figures with respect to areas in which abortion is obtainable on demand and those in which it is restrictive and where punitive measures await those who seek or procure abortion. Maternal ill-health, especially of a chronic variety is more difficult to evaluate. But if the incidence of fallopian tube disease is anything to go by, the paper will attempt to compare the occurrence of tubal infertility and pelvic inflammatory disease in

Nigeria with what obtains in other parts of the World. The presentation will end with a review of the available facts on the epidemiology of induced abortion in Nigeria.

Literature Review :

The Extent of the problem :

Between 1962 and now, no fewer than forty articles have appeared in various journals on induced abortions in Nigeria (Table 1.1). They all emanate from the big cities of southern Nigeria and are all cases admitted in hospital following complications of induced abortion. In these centers, abortion remains a major health problem as nearly one quarter of their gynecological beds are occupied by patients with complications of abortions.

Bio-social Characteristics :

Unlike what obtains in Latin America and India, most patients who present with complications of induced abortion in Nigeria are young, unmarried, nulliparous teenagers who are often in school (1 - 3). However, it will be incorrect to deduce from this statement that married women do not seek abortion. The correct situation is that abortion is slightly safer in the older and parous woman, who in addition, may be in a better position than the teenage school girl to pay for a safe abortion.

Table 1.1 : Publications on induced abortion in Nigeria according to areas of publication (1962 - 1991)

Town	No. of Publications	% of Gynecological
Lagos	14	15 - 20
Benin City	11	25 - 28
Ibadan	7	20 - 25
Ilorin	4	6 - 12
Western Nigeria	2	
Port Harcourt	4	15 - 20

- Sources : 1. Maternal Mortality. A Global Fact-book, WHO Geneva, 1992, pp 177 - 198.
 2. Maternal Mortality Rates. Second Edition. WHO Geneva. 1986 P9.

3. Personal Communication.

Strain on Hospital Services :

All published data confirm that the cases of induced abortion place great strain on available hospital services. The figures from the University of Port Harcourt University teaching hospital (Fig 2) amply demonstrate this fact.

Table 2 : Induced Abortion - Strain on hospital services at the University of Port Harcourt Teaching hospital (1987 - 1990).

Disease condition	Age (Yrs)	Duration of Stay (days)	Hospital fees (Naira)	Blood transfusion (Units)
Spontaneous Abortion (n=359)	27 (18 - 48)	1 (0 - 3)	25 (20 - 45)	2 (0 - 3)
Induced Abortion (n=145)	20 (13-30)	24 (2-169)	1298 (25 - 11,683)	5 (0 - 6)
Ruptured Ectopic (n=178)	25 (20 - 35)	10 (7 - 19)	956 (805 - 1653)	4 (0 - 5)
Uterine Fibroids (n=244)	32 (19 - 55)	14 (7 - 34)	850 (702 - 1478)	4 (0 - 6)

Abortion related Maternal Deaths :

Figures quoted for abortion related deaths will be fairly accurate in parts of the World where abortion is obtainable on demand as adequate services to meet this demand are provided and the women are willing to use the services. In such a scenario, proper record keeping is feasible and so the contribution of abortion related deaths to overall maternal deaths will be more correctly ascertained. This is what obtains in many developed countries of Western Europe - Sweden, Finland and Britain to mention a few. Where abortion laws are restrictive and services poorly organized or where women are unwilling to use existing services, cognisance is taken only of the few reported cases and the estimates of abortion related deaths become entirely speculative.

Of the 40 - 60 million women who seek termination of unwanted pregnancy annually (4), it is estimated that about 100,000 to 200,000 of them will die (5). But these deaths are disproportionately divided between developed countries where abortion is often available on demand and developing countries where abortion laws tend to be restrictive. In some Latin American countries where it is estimated that about 10 to 30 per cent of Obstetrics and Gynaecological beds may be occupied by persons suffering abortion complications, between 13 and 53 per cent of the maternal deaths may be due to abortion (6). In Africa, on account of the paucity of authentic records, abortion related deaths are gleaned only from hospital records. Such records show that sub-saharan Africa, like most parts of the developing World, has high rates of abortion related maternal deaths (7,8). The proportion of maternal deaths attributable to abortion in these reports range between 28 per cent in Zimbabwe and 54 per cent in Ethiopia (9). The situation in Nigeria is not very different from that observed for the rest of Africa - the proportion of induced abortion to overall maternal mortality is high and ranges between 6 per cent in Ibadan and 50 per cent reported from Lagos (1 - 3).

To conclude this section on abortion related deaths, it needs to be pointed out that induced abortions are often safe procedures if carried out early (before 12 weeks), by competent persons and in appropriate environments. When deaths occur, the commonest cause is sepsis followed by hemorrhage.

Maternal Morbidity in Induced Abortion :

For those who escape death following induced abortion, recovery is not always complete. Available evidence suggests that the major long term sequelae of induced abortion - pelvic inflammatory disease, infertility and ectopic pregnancy are rife in areas of the World where the immediate life threatening complications of sepsis, hemorrhage and uterine perforation are also frequently encountered.

In Port Harcourt, secondary infertility is the commonest outpatient gynecological complaint. Estimates of the frequency of ectopic pregnancy in Jamaica, Nigeria and Ghana are high. Pelvic inflammatory disease is a major problem in several developing countries where complications of induced abortion also constitute a nagging problem.

CONCLUSION :

To my mind, there is no better way of concluding this session on epidemiology of abortion than the case report of a young girl who was treated in my unit.

Miss R.P., a 17 year old class 3 secondary school girl, Christian by faith, lived in a slum area of Port Harcourt called small London, near Rainbow town. The only survival of the three siblings of her parents, she herself was an orphan - her parents died in her infancy. So, since the age of five years, she lived with a distant relative who had no reasonable means of livelihood.

She was dumped in the Casualty department of the hospital by neighbours one day in early June 1986, one week after she had introduced cassava stem into her vagina to procure termination of a 16 week old unwanted pregnancy. The fetus was expelled two days after the introduction of the cassava stem and the placenta followed another two days thereafter. Subsequently, she became febrile, had severe lower abdominal pain and grew progressively weak. Vaginal blood loss had been profuse.

No other history was forthcoming as the patient was desperately ill. She was severely dehydrated, markedly pale and was very hot to touch. Her vital signs were: temperature, 40 C; pulse rate, 120/min; respiratory rate of 30/min; and blood pressure of 80/60 mmHg. Although she was conscious, she was confused. Her abdomen was grossly distended, tense and very tender to palpation. There was no free fluid but bowel sounds were depressed. Her chest was normal and there were no cardiac murmurs. On pelvic examination, there were no injuries to the lower genital tract but the uterus and the appendages could not be discerned on account of abdominal tenderness. Rectal examination was normal.

The diagnosis was septic induced abortion with generalized peritonitis and septicæmic shock.

Her haemoglobin was 5 g/dl. There was leucocytosis and also hypokalemia. In the ward, management was very difficult as a financial deposit was required for everything - blood transfusion, intravenous fluid, medications and surgical intervention. However, these difficulties were overcome and after a protracted intensive therapy she recovered and she was discharged home after a total 169 days stay in hospital and a bill of 11,683.00 Naira, which was waived on humanitarian grounds by the hospital authorities. We did not stop there. We went on with her rehabilitation and were able to obtain a job for her as a security agent in a private establishment.

Finally, let me state that this paper does not seek to make a case for the liberalization of abortion on demand in Nigeria. That is for the appropriate authorities to decide. It seeks however, to place available scientific information on the table for discussion:

1. That induced abortion is widely practiced in Nigeria as well as globally irrespective of the status of a law governing its practice.

2. That the practice is considerably under-reported.

3. That making abortion illegal does not stop the practice. It merely drives the practice underground and makes it more dangerous.

4. That abortion related deaths and complications are less frequent in parts of the World where abortion is freely available on demand.

Once again, I thank the organizers for inviting me to speak at this seminar, and I thank you all for giving me audience.

REFERENCES

1. Omu AE, Oronsaye AU, Faal MKB, Asuquo EEJ : Adolescent induced abortion in Benin City, Nigeria *Int J Gynaecol Obstet* 1981; 19: 495 - 499.
2. Oronsaye AU, Ogbeide O, Unuigbo E : Pregnancy among school girls in Nigeria. *Int J Gynaecol Obstet* 1982; 20: 409 - 412.
3. Briggs ND : Adolescent sexuality in an African country. Paper read at the 13th World Congress of Gynaecology and Obstetrics (FIGO), Singapore, 1991.
4. Henshaw SK : Induced abortion : a Worldwide perspective. *Family Planning Perspectives* 1986; 18(6) : 250 - 254.
5. Royston E, Armstrong S : Preventing Maternal Deaths. WHO Geneva 1989; pp 110.
6. Viel B : The health consequences of illegal abortion in Latin America. In Zatuchni G. *et al Pregnancy termination : Procedures, Safety and New Developments*, London, Harper and Row 1979.
7. Macpherson TA : A retrospective study of maternal deaths in the Zimbabwe black. *Central African Journal of Medicine* 1981; 27(4) : 57 - 60.
8. Armon PJ : Maternal deaths in the Kilimanjaro region of Tanzania. *Transactions of the Royal Society of Medicine and Hygiene*. 1979; 73(3) : 284 - 288.
9. Kwast BE et al : Maternal mortality in Addis Ababa, Ethiopia. *Stud Fam Planning* 1986; 17(6) : 288 - 301.

CLINICAL CONSEQUENCES OF UNSAFE AND INDUCED ABORTION AND THEIR MANAGEMENT IN NIGERIA

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Induced abortion is a significant cause of morbidity and mortality in women in Nigeria as it is worldwide. The full extent of the problem is not known at present because only a small

proportion of women with abortion complications present in health institutions. As a result of the illegal status of abortion in this country, most unsafe abortions are either self-induced or take place in clandestine venues - pharmacy shops, offices of private practitioners or in the sheds of untrained illiterate abortionists. When complications arise from such secretly performed procedures, the patients are often reluctant to report in hospital and indeed, may be discouraged from doing so by the abortionist who would not like to be identified. Thus, only seriously ill patients ever report in hospital and even they may refuse to disclose the true cause of their illness. Under such circumstances, hospital data tend to underestimate the rate of abortion complications and until well conducted community studies are available in Nigeria, the full extent of the problem may never be known.

Nevertheless, studies carried in several hospitals in Nigeria have given some insight into the magnitude of the problem (1-9). As shown in Table 1, such studies have shown that induced abortion is a major cause of maternal mortality in Nigeria. Abortion was responsible for between 2.2 and 51 per cent of all maternal deaths in the studies with a case fatality ratio of between 1.0 and 1.5 per cent. A projection of these figures nationwide would suggest an estimated mortality ratio of 1000 deaths per 100,000 illegal abortions (or one abortion per 100 procedures). Although it is difficult to compare data on abortion between countries because of differences in abortion laws and practices, the above mortality figures represent some of the highest estimates ever reported from any country in Africa. Apart from the illegal status of abortion, other reasons for the high mortality in Nigeria include poor access and quality of medical facilities to treat complications of abortion and the wide array of people who carry out unsafe abortion.

Table 1: Hospital-based reports of mortality from induced abortion in Nigeria

Area of Study*	Ref	Year	Sample size	Case fatalities	Mort/100,000 births	% of maternal deaths
Benin	1	1970-71	500			12.1
Benin	2	1973-85	3592	1.0	126	22.4
Benin	3	1974-79	1418	1.1	119	26.7
Ibadan	4	1962-71	183		154	6.6
Ilorin	5	1983-84	852	5.9		
Ilorin	6	1972-86	12,736	0.4	31	
Lagos	7	1966-72	1238	1.5	178	51.4
Lagos	8	1982	369			2.2
Ile-Ife	9	1977-88	na			12.5
Ile-Ife	12	1989-90	74		174	35.1

* Reports are from large teaching hospitals in urban areas

Abortion morbidity data are more difficult to quantify but they have similarly been derived from hospital data in Nigeria. Studies have shown that complications of induced abortion account for between 6.1 and 46 per cent of hospital admissions in Nigeria (6,7,10) and for 4 to 50 per cent of all gynecological admissions (3,7,10,11). In most hospitals in Nigeria, the commonest gynecological emergency is incomplete abortion and the commonest minor operations done are for complications of abortion. Gynecologists spend a sizeable proportion of their clinical time treating complications of induced abortion.

EARLY COMPLICATIONS OF INDUCED ABORTION

The complications of induced abortion occurring in Nigeria can be divided into two categories - early (that is, complications occurring within one month of the abortion) and late (those occurring more than one month after the procedure). It is fair to say that at present we have some information on early complications of abortion in Nigeria but virtually no information on late complications. This is because of the occult nature of presentation of late abortion complications and the difficulty in obtaining correct information on previous abortion from women in areas with strict abortion laws. The nature and severity of abortion complications are determined by such factors as the method of abortion, the skill of the provider, the duration of pregnancy and the accessibility and quality of medical facilities to treat abortion complications. Unfortunately, all of these factors operate negatively in Nigeria as abortion is often performed by unqualified personnel using dangerous instruments in dirty surroundings and the hospitals are often ill-equipped to handle severe complications of abortion. Thus, as shown in Table 2, very severe complications of abortion have been reported from large teaching hospitals in Nigeria.

Table 2: Complications of unsafe and illegal abortion in Nigeria

	Ile-Ife	Calabar	Enugu
Sample Size	(12)	(13)	(14)
Complications, n (%)	74	147	84
Sepsis (all types)	62 (83.8)	98 (72.1)	43 (51.0)
Hemorrhage	38 (51.3)	56 (41.2)	43 (51.0)
Uterine Perforation	6 (8.1)	12 (8.8)	
Bowel Perforation	2 (2.7)	1 (0.7)	
Acute Renal Failure		2 (1.5)	1 (7)
Deep Vein Thrombosis		1 (0.7)	1 (7)
Tetanus		1 (0.7)	3 (21)
Bowel Fistulae			2 (14)
Anaesthetic Death			1 (7)
Bladder Injury	1 (1.4)		
Psychosis	1 (1.4)		

The most common early complications of abortion in Nigeria are hemorrhage, sepsis and injuries to pelvic and intra-abdominal organs. Hemorrhage (both internal and external) is produced by retained products of conception, lacerations of the genital tract and perforation of the uterus in the area of the broad ligament. Some anaesthetic agents such as halothane may provoke bleeding by causing uterine atony and sometimes hemorrhage may be a result of coagulation failure arising from concomitant sepsis or from previous death of the conceptus.

Sepsis is the commonest complication and the commonest cause of mortality from abortion in Nigeria. Sepsis is invariably present whenever a woman is admitted in hospital with an abortion complication although published series suggest a rate of between 49 and 80 per cent (13,14). The vast majority of cases of infection stem from the use of unsterile instruments by unskilled abortion providers although sepsis also results from retained products, from premature rupture of the fetal membranes and from intestinal injury. Although clinical criteria vary, abortion is usually considered septic when there is (1) fever of at least 38.0c for 24 hours or more, (2) foul smelling or purulent vaginal discharge and (3) any other evidence of pelvic infection such as lower abdominal pain. The patient's pulse is usually full, rapid and bounding and there may be anaemia and jaundice. During pelvic examination, manipulation of the cervix usually produces severe pain and there may be evidence of interference e.g. tenaculum marks, on the cervix and vagina.

The most serious complication of septic abortion in Nigeria is septic shock, acute circulatory failure associated with gram negative organisms, which accounts for the majority of abortion-deaths. Septic shock appears to be quite common in Nigeria with Megafu and Ozumba (14) reporting an incidence as high as 20 per cent in their recent series from Enugu. Previously reported incidence of septic shock in septic abortion in Nigeria were 6.2 per cent from Benin City (3) and 4.3 per cent from Ibadan (15) and most of the cases were invariably fatal.

Another type of sepsis is that produced by clostridia organisms. *Clostridium welchi* infection used to be a major complication of induced abortion in this country in the past but is now less common. However, *Clostridium tetani* (tetanus) is still common with most recent series reporting at least one case from different parts of the country (5,6,11,13,14,15,16,25). Tetanus is common in terminations carried out by traditional practitioners or that are self-induced and is due to the introduction of items such as coat-hangers, herbal concoctions or native vaginal pessaries.

Trauma to pelvic and abdominal organs is another common complication of abortion in Nigeria. Trauma is produced by the instruments used by the abortionists and most often involves the cervix and the uterus. Most Nigerian authors have reported incidence of uterine perforation varying between 8 and 20 per cent (2,12,14) although it is obvious that its incidence may be under-estimated because most cases of uterine perforation are not clinically overt. The extent of injuries to adjacent organs following uterine perforation depends upon the experience of the abortionist and the period of gestation at which the termination was performed. Reported injuries have included intestinal injuries (17,18), perforation of the broad ligament resulting in broad ligament hematoma (12), injuries to the urinary tract (12), and perforation of the pouch of Douglas and the rectum (18). At Ile-Ife, we have seen the case of an abortion that resulted in uterine perforation, where a loop of intestine was pulled through the rent created in the uterus. The abortionist proceeded to clamp and cut the loop thinking it was the umbilical cord of the fetus, but stopped when he encountered fecal matter. That patient had to have resection of nearly one foot of small intestine and was lucky to be alive.

LATE COMPLICATIONS OF ABORTION

As mentioned earlier, no systematic studies have measured the long term effects of illegal abortion in Nigeria, but anecdotal evidence indicates that not only fertility but also other aspects of a woman's health may be impaired in the long term by abortion. For example, although we are uncertain as to the importance of the role played by abortion in the high incidence of secondary infertility in Nigeria, nevertheless, we know that it is an important contributory factor. A recent study in Kenya showed that women with secondary tubal infertility had had more induced abortions than controls (19). Such a study has not been done in Nigeria but it is well known that infertility is the commonest condition presently encountered in most gynecological clinics in the country. The tubal factor was identified by the WHO multicentre infertility study (20) to be the commonest cause of secondary infertility in sub-saharan Africa. While it may be tempting to attribute this pattern to sexually transmitted diseases, it must be recognized that illegal abortion

may play a more important role.

There are several mechanisms by which illegal abortion may cause infertility. The most obvious method is by way of pelvic sepsis which can produce severe tubal damage and pelvic adhesions and predispose the patient to secondary infertility or ectopic pregnancy. With a post-abortion sepsis rate of 80 per cent (13,14) it is clear that this could be a very significant cause of infertility in this country. Another factor is the use of hysterectomy to treat abortion complications. Two of the patients in our series at Ile-Ife required hysterectomy (12); Megafu and Ozumba (14) reported two abortion-related hysterectomies from Enugu, while Okojie (11) reported four cases from Benin. Also, infertility may result from Asherman syndrome (uterine synechiae) which is due to the over-curettage of the endometrium from a dilatation and curettage. Asherman syndrome is now a leading cause of amenorrhoea and secondary infertility in Nigeria although the condition is easily treatable.

Other long term complications of illegal abortion include the possible effects on subsequent pregnancies. Some studies of illegal abortion suggest that abortions may increase the risk of subsequent prematurity, spontaneous abortion and low birth weight infants (21,22,23). In a recent retrospective controlled study (24), we were able to demonstrate a significant reduction in mean gestational age and mean birth weight in a group of women who gave histories of previous induced abortion. The effect is presumably due to excessive and traumatic dilatation of the cervix and should be minimized if the less traumatic manual vacuum procedure is universally adopted.

MANAGEMENT OF ABORTION COMPLICATIONS

Good management in hospitals can reduce mortality and long term morbidity from abortion complications. Unfortunately, many hospitals in Nigeria are ill-equipped to handle severe complications of abortion because of chronic shortages in manpower, equipment and consumables. Even where the infrastructures exist, the proper philosophy of management has not been set up to enable health care providers to recognize the special needs of high risk groups such as women with abortion complications. The management of abortion complications calls for (1) blood transfusions, (2) large doses of antibiotics to control infection, and (3) surgery to control hemorrhage or remove the source of infection. Where facilities are available, laboratory tests for diagnostic purposes are recommended, including complete blood counts, smears and cultures from the genital tract to identify the dominant organisms and check antibiotics sensitivity, urinalysis, blood cultures, evaluation of serum electrolytes and coagulation studies. Plain X-rays of the pelvis, abdomen and chest may be necessary to check for the presence of foreign bodies within the uterus and help identify uterine perforation and peritonitis.

Blood transfusion is often critical to the immediate survival of a woman hemorrhaging from incomplete abortion. Some patients present in hypovolemic shock and unless blood is immediately available, their chances of survival are small. Immediate blood transfusion

combined with the administration of an oxytocic to control bleeding is the appropriate emergency management before steps are taken to remove the products of conception. Unfortunately, in most hospitals in Nigeria, blood is often not readily available for emergency use and this contributes significantly to abortion mortality (25).

The treatment of septic abortion involves the parenteral administration of broad-spectrum antibiotics to cover a wide range of micro-organisms since multiple bacteria are often involved. The recent introduction of the second and third generation cephalosporin have increased the range of antibiotics for use in septic abortion but these drugs are expensive and have minimal activity against anaerobic bacteria and pseudomonas species. Surely clinical trials are needed to ascertain the best antibiotic combinations for the treatment of the severe forms of septic abortion that are seen in Nigeria. The management of septic shock is even more problematic as it requires the use of massive doses of antibiotics, intravenous fluids, steroids and vasoactive drugs. Septic shock is the most serious complication of abortion worldwide; complex medical and surgical decisions as well as costly equipment are required to save lives.

Surgery is an important tool in the management of abortion complications. Incomplete abortion is best managed by manual vacuum aspiration followed by ergometrine although some practitioners still use dilatation and curettage. Manual vacuum aspiration now appears to be the preferred technique in most countries because it is less traumatic and is associated with a smaller amount of blood loss. In addition, manual vacuum aspiration can be quickly learnt by less qualified staff and so can be adapted for use at the primary care level.

With concomitant sepsis, it is often preferable to delay specific surgery for up to 12 hours in order not to disseminate infection. Laparotomy may be needed to control hemorrhage or deal with infection. The extent of surgery depends on the pathology but could range from simple drainage of abscesses or repair of lacerations to gut resection and end to end anastomosis, colostomy or hysterectomy. Hysterectomy is the most serious operation particularly when carried out in young girls and must be carefully considered before it is undertaken. Although clinical practice varies, currently cited indications for hysterectomy include septic shock that is unresponsive to antibiotic treatment, serious uterine perforation, pelvic or myometrial abscesses, a uterus larger than 16 weeks, the presence of intrauterine clostridium organisms and the presence of detergent or caustic material within the uterus.

CLINICAL BURDEN OF UNSAFE ABORTION IN NIGERIA

The management of abortion is a tremendous burden on the scarce clinical resources of many hospitals in Nigeria. Published reports indicate that abortion cases account for 14 to 57 per cent of gynecological admissions in some Nigerian hospitals (10,12,14, 27). In these hospitals, abortion complications often require more care and more expensive investigations and treatment than normal delivery or other major gynecological care. For example, treatment of complicated abortions has been reported to require comparatively larger quantities of blood (25,28). Blood is often in short supply in most Nigerian hospitals and therefore its diversion to treat abortion

complications is a major clinical strain.

Also, most abortion patients tend to stay longer in hospital, occupying beds that could have been used for other clinical cases. During the period January 1 to July 30, 1991, our daily bed occupancy at the Obafemi Awolowo University Hospital included at least two cases of illegal abortion. The mean duration of hospitalization of a group of 134 teenage girls with complications of abortion reported in Lagos by Akingba and Gbajumo(29) was 7.1 days. In Benin, Okojie (11) reported that up to 7 per cent of 59 women with complicated induced abortions were hospitalized for approximately 42 days. These extended periods of hospitalization add to costs and although no systematic study has evaluated the cost of treatment of illegal abortion in Nigeria, it is conceivable that it is enormous. Figa-Talamanca et al. (30), using an indirect field interview approach, demonstrated vividly the high cost of abortion to medical services in Ibadan. There is simply not the resources in Nigeria to pay these costs and at the same time meet basic needs in maternal health. If a substantial portion of hospital funds have to be reserved for the treatment of complications of illegal abortion, the consequence could be that not enough resources will be available to improve maternity and delivery services, a capability that is badly needed if the present high maternal mortality rate in Nigeria is to be reduced.

CONCLUSION AND RECOMMENDATIONS

An appropriate question from the foregoing presentation concerns the desired role of clinical services in reducing the high morbidity and mortality associated with illegal abortion in Nigeria. Apart from providing contraceptive services, training and services, we believe that effective and prompt treatment of abortion complications in hospital can reduce abortion-related maternal mortality.

Coeytaux (31) stated in her elegant article that "operations research are needed in African countries to improve access to safe abortion and contraceptive services". Particular research is needed in methods that would improve the skills of physicians and non-physicians in the management of abortion complications and that would lead to increased availability of blood, antibiotics and intravenous fluids. It would be relevant to examine how the health services could be organized such that nurses and midwives in rural health centers can be taught to perform simple tasks like the administration of ergometrine, commencement of intravenous fluids, and possibly manual vacuum aspiration before referring abortion patients to secondary care centers. The criteria for referral and the referral network also need to be clearly defined. Retraining of secondary and tertiary care physicians in the management of the more serious complications of abortion is also warranted particularly in such areas as surgery for abortion, intensive care monitoring of patients, use of blood and blood products and antibiotic treatment.

To complement these efforts, research is needed to determine how to increase the number of women with abortion complications who seek early and appropriate medical intervention. Answers are required to such questions as: why do women with abortion complications not report early for appropriate medical intervention? What is the time interval between the

development of the complications and their presentations in hospital? What is the attitude of health personnel to women with abortion complications? Such research may be more difficult to conduct but holds the key to immediate wide scale reduction in maternal mortality in the present climate of a strict national abortion law.

REFERENCES

1. Courtney, L.D. Maternal parity, age, hemoglobin level, mortality rate, labor and complications in a tropical center. *J Irish Med Assoc* 69:157,1974.
2. Unuigbo, J.A., Oronsaye, A.U. and Orhue, A.A. Abortion-related morbidity and mortality in Benin City, Nigeria:1973-1985. *Int J gynaecol Obstet* 26:435,1988.
3. Omu, A.E., Oronsaye, A.U., Faal, M.K.B. and Asuquo, E.J. Adolescent induced abortion in Benin City, Nigeria. *Int J Gynaecol Obstet* 19:495,1981.
4. Ojo, O.A. and Savage, V.Y. A ten year review of maternal mortality rates in the university hospital, Ibadan. *Am J Obstet Gynaecol* 118(4):517,1974.
5. Adetoro, O.O. Septic induced abortion at Ilorin, Nigeria: an increasing gynecological problem in developing countries. *Asia-Oceania J Obstet Gynaecol* 12(2):201,1986.
6. Adetoro, O.O. A 15 year study of illegally induced abortion at Ilorin, Nigeria. *Int J Gynaecol Obstet* 29:65,1989.
7. Akingba, J.B. Abortion mortality and other health problems in Nigeria. *Nig Med J* 7(4):465,1977.
8. Olukoya, A.A. Pregnancy termination: Results of a community-based study in Lagos, Nigeria. *Int J Gynaecol Obstet* 25:41,1987.
9. Ogunniyi, S.O., Makinde, O.O. and Dare, F.O. Abortion-related deaths in Ile-Ife, Nigeria: A 12 year review. *Afr J Med Med Scs* 19(4):271,1990.
10. Akinla, A. Abortion in Africa. In: Hall, R.E., ed. Abortion in a changing world. Proceedings of an International Conference, Hotsprings, Virginia. Columbia University Press, N.Y., 1:291-30, 1970.
11. Okojie, S.E. Induced illegal abortion in Benin City, Nigeria. *Int J Gynaecol Obstet* 14(6):517, 1976.
12. Okonofua, F.E., Onwudiegwu, U. and Odunsi, O.A. Illegal induced abortion: In-depth study of 74 new cases in Ile-Ife, Nigeria. *Trop Doc* (In Press).

13. Archibong, E.I. Illegal induced abortion: A continuing problem in Nigeria. *Int J Gynaecol Obstet* 34:261, 1991.
14. Megafu, U. and Ozumba, B.C. Morbidity and mortality from induced illegal abortion at the University of Nigeria Teaching Hospital, Enugu: A five year review. *Int J Gynaecol Obstet* 34:163, 1991.
15. Ojo, O.A. Septic abortion in Ibadan: a ten year review of cases. Presented at the International Planned Parenthood Federation Conference on the medical and social aspects of abortion in Africa, Accra, Ghana, Dec 12-18, 1973.6p
16. Ogedengbe, O.K. Problems associated with unsafe abortion- medical perspectives. Presented at the Consultative Group Meeting on abortion care organized by the Nigerian Medical Association, Ota, Ogun State, Aug 15-18, 1991.
17. Imoedemhe, D.A.G. et al. Intestinal injuries following induced abortion. *Int J Gynaecol Obstet* 22:304, 1984.
18. Megafu, U. Bowel injury in septic abortion: the need for more aggressive management. *Int J Gynaecol Obstet* 17(5):450, 1980.
19. Okumu, C., Kamau, R.K. and Rogo, K.O. Past reproduction and sexual practices of women with tubal infertility at Kenyatta National Hospital. *E Afr Med J*, In Press.
20. Cates, W., Farley, T.M.M. and Rowe, P.J. Worldwide patterns of infertility: is Africa different? *Lancet* 11:596, 1985.
21. Liu, D.T.Y., Melville, H.A.H. and Martin, T. Subsequent gestational morbidity after various types of abortion (letter). *Lancet* 2(7774):431, 1972.
22. Papaevangelou, G., Vrettos, A.S., Papadatos, C. and Alexiou, D. The effect of spontaneous and induced abortion on prematurity and birthweight. *J Obstet Gynaecol Brit Cwlth* 80(5):418, 1973.
23. Sobowale, O.B. Previous abortion and outcome of subsequent pregnancy. *E Afr Med J* 65(4):246, 1988.
24. Okonofua, F.E., and Odutayo, R. Pregnancy outcome after illegal induced abortion: A retrospective historical controlled study. *Afr J Med Med Scs*. In Press.

25. Ladipo, O.O. Preventing and managing complications of induced abortion in third world countries. *Int J Gynaecol Obstet* 3:21, 1989.
3326. Adadavoh, B.K. and Akinla, O. Postabortal and postpartum tetanus. *J Obstet Gynaecol Brit Cwlth* 77:1019, 1970.
27. Akinla, O. The problem of abortion in Lagos. In: Israel Academy of Sciences and Humanities. Proceedings of the 6th World Congress on Fertility and Sterility. Tel Aviv, May 20-27, 1968. Jerusalem, Israel. Israel Acad of Sciences and Humanities, 113-120.
28. Population Reports: Complications of abortion in developing countries Ser F, No7:105, 1980.
29. Akingba, J.B. and Gbajumo, S.A. Procured abortion: Counting the cost. *J Nig Med Assoc* 7(2):17, 1970.
30. Figa-Talamanca, I., Sinnathuray, T.A., Yusof, K. and Fong, C.K. et al. Illegal abortion: An attempt to assess its cost to the health services and its incidence in the community. *Int J Health Serv* 16(3):375, 1986.
31. Coeytaux, F.M. Induced abortion in sub-Saharan Africa: What we do and do not know. *Stud Fam Planning* 19:186, 1988.

DISCUSSION

Discussion of the papers reinforced the speakers' description of the magnitude of induced abortion in Nigeria. Participants noted that most of the available figures on abortion morbidity and mortality are from a few big cities in Southern Nigeria. This does not mean that there are no cases in the rural areas or in northern Nigeria. The pattern merely represents the fact that it is predominantly workers in the few big cities that have bothered to keep records. In addition, it was observed that only the few cases that present in hospital are reflected in the records. Majority of women with abortion complications, particularly in rural areas, do not report in hospital for fear of social stigmatisation and only seriously ill patients ever report in hospital. Participants agreed that this was a major cause of mortality and long term morbidity from abortion and that there was a need to study the magnitude of the problem in the community and in rural institutions.

It was observed that most hospital admissions for botched abortions in Nigeria were unmarried women between the ages of 15 and 19 years. Unwanted pregnancy is not infrequent in older and married women but in such cases, the women are more likely to continue with the pregnancy rather than resort to unsafe abortion. It was noted by some clinicians that married women are occasionally admitted with complications of unsafe abortion in situations where a pregnancy is due to another man. For young teenage girls, the fear of parents and the desire to remain in school were recognized as the major reasons for seeking termination of pregnancy. The need to keep the entire process secret and the lack of funds and experience were postulated to be responsible for their tendency to use unsafe rather than safe methods of abortion.

One commentator was of the view that complications arise as a result of use of "quacks", but several others observed that this was not necessarily so. It was made clear that various health care personnel are also responsible for abortions that result in mortality. In such cases, the abortions had been performed by inexperienced professionals in unhygienic settings. Particular causes of complications under such circumstances include the use of unsterile instruments, retained products of conception, perforation of the uterus and premature rupture of the fetal membranes. One participant commented that: "what this shows is that making abortion illegal does not stop the practice, it only makes it more dangerous".

The participants agreed that the long term complications of abortion have been less well studied but they suggested that the high and increasing rate of infertility in Africa, the rising incidence of ectopic pregnancy and the growing problem of cervical incompetence amongst women in Nigeria may be due to the high incidence of poorly performed abortions.

In response to a question on whether there were enough doctors trained to provide abortion care, it was noted that competent medical personnel exist but that abortion is not a priority or even often recognized as a major problem in the health care delivery system and so provision is not made in planning and allocation of resources for the management of abortion complications. The existing health infrastructure cannot support the volume of clinical materials

needed to manage severe abortion cases.

It was observed that there is a need for private hospitals, maternal homes and village health clinics to keep records of abortion-related cases to facilitate the gathering of data. Participants expressed concern about the poor state of record keeping in Nigeria and the negative attitude towards research by doctors in the private sector. A strong recommendation was made that research on abortion and good record keeping be encouraged by the medical profession. They emphasized the need for counselling to reduce the number of abortions taking place and early hospitalization for women with botched abortion; for proper training of doctors to enable them assess the uterine size; and the need for proper diagnosis to avoid disguised abortion complications. The need to involve other health workers in the management of abortion complications, so that early diagnosis and some first aid or basic treatment can be given in emergencies, was also noted.

CHAPTER 2 : EXAMINATION OF THE HEALTH SERVICES

REVIEW OF ABORTION SERVICES IN NIGERIA AND POSSIBLE ALTERNATIVES IN SERVICE DELIVERY SYSTEM

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Abortion is one of the oldest and most widely practiced methods of preventing unwanted birth. Unwanted and unplanned pregnancies are common in both developing and developed countries and indeed, nearly 33 million legal abortions are performed in the World each year. In addition, there are countless illegally induced pregnancy terminations and many babies that are born are unwanted.

Women who confront an unwanted pregnancy often choose to risk an abortion in spite of its inherent risks. The World Health Organization reports that unsafe induced abortions are responsible for as many as 50 per cent of maternal deaths in some regions, making it the major killer of women especially in developing countries of the World including Nigeria. This is because more than two-thirds of women in these regions have no ready access to legal abortion or alternative avenues to cope with unwanted pregnancies.

Abortion Services : the Present Situation

Abortion services in Nigeria are presently governed by restrictive laws (criminal code in

the south and penal code in the north) which prohibit induced abortion except to save the life of the woman. This gives way to clandestine induced abortions by unskilled personnel with resultant high mortality and morbidity, tremendous strain on the limited health resources and unquantifiable human suffering.

Induced Abortion - Who performs it? With What? and Where?

It has been observed that educated and gainfully employed women have better access to safe abortions than young, uneducated and poor women. The status of the practitioner cuts across all cadre of health workers and they include medical doctors particularly general medical practitioners, nurses, chemists, traditional healers and professional abortionists. Although simple and safer methods are now available, many of these providers still resort to unscientific and highly toxic methods such as menstrogen injection, oral cumorit, codeine tablets, "Dr Bonjeans", chemical vaginal pessaries and such devices as sticks, chicken bones, coat hangers and bicycle spokes. In many instances, the operating rooms are even less scientific as they include chemist shops, mechanical workshops, carpentry worktables and private dining tables.

Studies have shown that cases of complications of abortions seen in many teaching hospitals in Nigeria come from medical doctors; in contrast, majority of those done by non-medically qualified abortionists have died before they reach these centers for treatment. One reason for this finding is believed to be the early recognition of complications and timely referral by medical practitioners. One major setback however, is the fact that majority of these orthodox medical practitioners still utilize the method of dilatation and curettage with its attendant risks of severe damage to the uterus and the genital tract. In addition, in only about 10% or less of cases of induced abortion, has some form of analgesia or anaesthetic been used.

Services for Complications of Abortion

For complications of abortion, no specifically defined policies and guidelines exist other than the care available within the prevailing health systems. In most instances, the inadequacies that exist in the health care system such as shortages of staff, equipment, materials and supplies contribute tremendously to the morbidity and mortality from induced abortion and its complications. Consequently, many patients die from delayed intervention due to shortages in intravenous fluids, blood and antibiotics. In a typical Nigerian teaching hospital, waiting periods for uterine evacuation average 48 hours and sometimes may be as long as 72 hours. At the primary and secondary health care levels, skills may be non-existent, inappropriate or outdated. Yet, no clearly defined referral system exists which would be valuable to strengthen the system.

However, in 1987 with the assistance of the International Projects Assistance Services (IPAS) some teaching hospitals in Nigeria commenced the training of medical doctors in the technique of Manual Vacuum Aspiration (MVA) for the treatment of incomplete and septic abortion. Some of the expressed benefits of MVA are its simplicity, relative safety from complications, adaptability to an outpatient facility and reduction in days spent in hospital. In focal locations such as the Ahmadu Bello University Teaching Hospital, some State Ministries of Health have responded positively by permitting their Physicians and Nurses to participate in the

regional training program.

Barriers to treatment of Botched Abortion

Socio-cultural Factors

The socio-cultural background of the society affects decisions and behavior concerning the management of abortion-related complications. In many instances, the belief about the causation of abortion especially where it affects a cherished pregnancy may delay presentation in hospital, and when assistance is finally sought, it may be from inappropriate quarters. In some cases, the affected woman may have to wait for the decision of her husband or elders in the extended family. In the case of induced abortion, the patient may not disclose that abortion has been procured, feigning heavy menstrual flow. Occasionally, the major barriers relate to the patient seeking a variety of alternative treatment sources which are tied to the culture and the prevailing beliefs of the society. These include the use of traditional herbalists, spiritual healers or diviners and prayer houses. In this situation, valuable time is wasted, thus decreasing the opportunity for a more favorable prognosis.

Accessibility Factors

Health facilities are unevenly distributed to the disadvantage of the rural and peri-urban areas, such that reaching a health facility for help becomes an uphill task. In addition, transportation may not always be available especially at night. When available, costs may be extremely prohibitive particularly in emergencies, when the patient is apparently critically ill and requires urgent and immediate resuscitation. Pre-payments may be demanded by the driver, who may be reluctant for other reasons, for example, the fear of police harassment in case the patient dies. The issue may be complicated by the lack of motorable roads, which is still a feature of most rural roads in Nigeria.

Health Services Factor

When the patient eventually arrives at a health service center, many constraints stand between her and timely intervention. These include the lack of supplies and equipment such as materials for uterine evacuation, resuscitation supplies (intravenous fluids, blood, etc) and drugs. Sometimes, life saving drugs such as oxytocics may need to be procured by a bleeding patient or her relations and this may be difficult at night when most drug stores are closed.

This situation has been worsened by the structural adjustment program and the inadequate funding of the health sector. The current practice in most government hospitals (and surely in private health institutions) is that patients have to pay a huge deposit before they receive care. Where fatality is imminent, the attending Physician may be compelled to give an undertaking that the patient or her relatives will pay for services rendered. Even when adequate or reasonable payments have been made, theatre space may not be readily available especially at night and access to the operating room may be delayed for lack of trolley, functioning lifts, etc. Even when the patient has reached a center with the necessary facilities and supplies, the problem of non-availability of trained, experienced and committed health personnel to carry out the necessary tests and procedures remain a major problem. This factor has been accentuated by the current

brain-drain going on in the health sector.

Program Options

To reduce the present maternal mortality and morbidity rates attributable to induced abortion, there is the need to review abortion services as they are today in Nigeria and find possible alternatives in the service delivery system.

As with contraception, the argument for or against abortion are not always based on facts or logic. Many people are caught between conflicting forces. As we have seen during the course of this seminar, when access to safe abortion services is limited because of social taboos, ignorance, inadequate finances or restrictive laws, unwanted pregnancy can have extremely adverse consequences for women including severe morbidity and death. Hence many countries have liberalized their abortion laws to varying degrees in an effort to promote maternal health. I believe it is now time for us to do the same in this country.

The Nigerian Medical Association in its communique released after the Consultative Group Meeting on induced abortion in Nigeria held in Ota in August 1991, suggested the need for a task force for the implementation of a program on abortion care services in Nigeria. To achieve this goal, administrators and policy makers need first to acknowledge the immensity of the problem of unsafe abortion and then to demonstrate the political will necessary to change the way abortion care is provided. Abortion policy must be based on the conviction that the preventable must be prevented. After acknowledging the problem, continued research must be conducted to ascertain the relative effectiveness of existing services and to identify the urgent needs.

The review of our abortion law is vital to ensure access to safe abortion, ensure the safe termination of pregnancy and provide opportunity for women to be counselled on contraception. In fact, data from many countries have shown a dramatic increase in contraceptive use following legally terminated abortion. Substantial evidence also shows that morbidity and mortality from unsafe abortion and its related drain on the health resources have been reduced drastically in countries that have liberalized their abortion laws.

The primary tenet of a system wide approach is the decentralization of services which has been identified by the World Health Organization as the principal health care strategy for achieving health for all. The critical element for success in efforts to decentralize care is the adoption of a system that links the community, primary referral, district and tertiary levels of care in an interactive network. Safe and appropriate care can then be developed and stratified according to the level of health care.

The element of available abortion care should encompass both curative and preventive services. Comprehensive therapeutic services should make use of appropriate technologies to make care available as close to patients as possible and must include an effective referral system. As we presently have a health system that operates within a legal environment that restricts provision of safe abortions, we can nevertheless take constructive steps to reduce suffering from unsafe abortion. This can be achieved by adopting the following measures:

- Reducing the need for abortion by making effective contraception widely available vis-a-vis provision of free voluntary contraceptive services, nationwide.
- Standardization of abortion care with the provision by the Federal Ministry of Health of a regular publication which should be distributed nationally. This should include guidelines for the treatment of abortion and information on manual vacuum aspiration techniques and legal criteria for providing therapeutic abortion.
- Planning for and supporting a system wide provision of safe and effective emergency treatment for abortion complications. This could be done by improving the quality and accessibility of medical treatment for abortion complications vis-a-vis training of medical residents on manual vacuum aspiration techniques for the treatment of incomplete and septic abortion. This compared to the standard procedure of D & C would reduce the waiting period before treatment can be given to these women by removing the need for the use of operating theaters as most vacuum aspiration procedures are done as day cases in the clinics or wards followed by family planning counselling and services at the time of treatment.
- Periodic training programs in manual vacuum aspiration should also be provided for general medical practitioners in private practice and non-physicians such as nurses and midwives. Abortion care techniques should also be included in the medical school curriculum so that medical practitioners would be formally trained to meet the challenges and dilemma of abortion.

This will greatly increase the number of personnel involved in providing abortion services. They should also be able to recognize and manage the medical complications of abortion as well as teach the patients the danger and signs so that problems can be identified and treated early. With the inclusion of nurses, midwives and other health care personnel, more people would have access to the treatment of incomplete abortion and its complications as well as achieving decentralization of services.

However, there must be established guidelines on abortion care for all health care personnel so that the services are not abused.

- Finally and this may be provocative, if there is reluctance to amend the law to make induced abortion freely available, the government may in fact adopt menstrual regulation services commonly understood as early uterine evacuation to bring in delayed menses as a safe, effective, culturally appropriate approach to fertility regulation. The most widely known and documented menstrual regulation program is that in Bangladesh. Family Welfare visitors including domiciliary midwives could be trained to provide family planning and menstrual regulation services to women in rural areas where the bulk of our reproductive women reside with poor transport and communication facilities.

In conclusion, with the commitment of policy makers and health care providers to eliminate needless, preventable death and injury from unsafe abortion, appropriate care can be made accessible to women in this country by involving the community at all cadre of health personnel in educating, counselling and provision of unhindered access to teaching accessible, cheap and safe abortion services. I would like to thank you all for your attention.

EXAMINATION OF HEALTH SERVICES AND SERVICE DELIVERY SYSTEM

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Since Nigeria's independence, various governments of the Federation have made varying monetary allocations to the health sector which in sum, have not been adequate to meet the severe health problems in the country. As a result, only a small proportion of the Nigerian population has traditionally received any form of modern health care services. It is certain that this anomaly is one of the causes of the very low life expectancy at birth and the generally high infant and adult morbidity and mortality rates in this country.

The absence of accurate health statistics is still a major problem in this country. However, it is noteworthy that a system for collecting basic health statistics on births, deaths, prevalence of the major diseases and other health indicators is being worked out by the Federal Government

with the assistance of some non-governmental organizations. Presently, some estimates are derivable from studies done in a few centers and are based on sample surveys, health institutions' records and special commissioned studies. The summary of the 1986 health records show very high maternal mortality rates being 18 per 1000 births in the rural areas, 6 per 1000 births in the urban centers and 15 per 1000 births nationwide. Although the exact number of maternal deaths is still unknown, it is clear that most of those who die are poor and live in neglected areas. Their deaths are never recorded because the deaths are not regarded as significant. This is particularly true of those unfortunate women who die from the complications of illicit abortion.

A conservative annual estimate of 50,000 maternal deaths occur in Nigeria. This represents approximately 10 per cent of the global maternal mortalities. What is most depressing is the realization that this mortality rate is similar to the rates of developed countries over two centuries ago. The variations are a reflection of varying levels of socio-economic development, availability of health infrastructure, health man-power distribution and quality of life.

Some of the leading causes of maternal deaths in Nigeria are hemorrhage, infection, toxemia, illicit abortion and obstructed labor. Low rate of contraceptive use also adds substantially to the high rate of maternal deaths. Illegal abortion from unwanted pregnancy is estimated to cause between 25 and 50 per cent of maternal deaths. Theologically, most deaths from abortion can be attributed to women's lack of access to family planning and their lack of access to safe abortion services.

The tragedy of maternal deaths in Nigeria is that nearly 90 per cent of them are preventable with careful planning. How then is the present health system meeting these onerous challenges?

The Health Services

Recognizing the defect in the health care system and the need for radical intervention, the Federal Government embarked on a program to reform the defective system. For the past 5 years, the Federal, State and local governments have worked together to evolve a National Health Care delivery system. Under this system, there are three levels of care: 1) the tertiary, which consists of 13 teaching hospitals; 2) the secondary, which consists of 119 district hospitals and 780 general hospitals; and 3) the primary, made up of 1071 health centers, clinics and dispensaries.

Tertiary Health Services

These are urban based, highly sophisticated technologically, heavily curative oriented and costly to maintain. The hospitals which are referral centers established to cater for complicated cases only serve a small percentage of the population. There are 13 of such hospitals in Nigeria and all of them are based in the big cities. Unfortunately, due to chronic shortage of manpower and the lack of drugs and equipment, these hospitals are now unable to meet the reproductive health needs of women. Most of the teaching hospitals are in a depressive state and are unable to function effectively. The situation has been worsened by the high cost of treatment in the hospitals which has led to severe under-utilization of the institutions.

Secondary Care Centers

Due to the creation of new States, more health institutions were established mostly in the big cities to provide both in-patient and out-patient services and to serve as referral centers on a 24 hour basis for complicated cases from the primary care centers. Unlike the teaching hospitals, they are less costly and more accessible to a larger fraction of the population. However, in view of the restrictive abortion law in the country, pregnancy terminations are hardly carried out except on a highly secretive basis. This level of care is also plagued with shortages in manpower, drugs and essential equipment. These days, women are unable to have basic laboratory investigations to detect early complications as reagents are often not available.

Comprehensive Health Centers

Community based health service centers are available in each State to serve as models for the delivery of primary health care in the States. These centers are similar to the State hospitals in terms of structure, equipment and services and provide comparable standard of care. The centers were built to provide comprehensive Maternal and Child Health and Family Planning services but unfortunately they are unable to function effectively and efficiently due to shortages in medical and nursing staff and all kinds of supplies.

Religious Hospitals

These are multifarious in nature and belong to various religious groups. They serve as referral points for cases from the primary care centers. They are usually better equipped, are staffed with dedicated workers and are easily available to majority of the populace. Unfortunately, due to their doctrines, abortion cases are hardly attended to but full Maternal Child Health and Family planning services are readily available to those who can pay the cost.

Private Hospitals

These hospitals have been established not on humanitarian grounds but purely for commercial purposes. They are spread through the nooks and corners of the country and provide a wide range of services including Maternal Child Health and Family Planning services. They are also the hospitals most willing to provide safe abortion services although the high fees they charge deter women from using their services. The private hospitals vary in the quality of service they offer - some are well staffed and well equipped but several of them are under-staffed and lack the necessary equipment. It is worthy of note that many referrals for botched abortions that are seen in secondary and tertiary institutions are from private hospitals. Clearly, training of private practitioners in safe abortion methods should be an important component of any efforts to reduce abortion-related maternal mortality and morbidity.

Primary Health Centers

The primary health care scheme which has been underway in Nigeria since 1986 is the most peripheral and the most important component of the health care services because it is closest to the people and the activities take place where they live and work. However, it demands extensive planning since it requires to get people to think and do things at their level and to take collective responsibility. The primary health care facilities that have been established in Nigeria

include First Aid Stations, dispensaries, health centers and maternity centers. The range of services they provide comprise the basic health services including health education, simple laboratory tests and preventive care. Unfortunately, some local governments are yet to implement the scheme. The few that have been established lack appropriate management support system i.e. budgetary and logistic support necessary for supply of essential drugs and equipment and for training, supervision and staffing. Although the Bamako initiative program jointly sponsored by UNICEF and the WHO as a means of promoting self reliance of community in sustaining primary health care through cost recovery and drug revolving fund system is available in some rural areas, unfortunately the scheme lacks managerial capabilities. That notwithstanding, the system is likely to remain the main vehicle for delivery of health care to the periphery.

Community Health Workers

The health care workers at this level are volunteers trained to provide minimum MCH/FP services including health education and referral of patients. They have continued to play a key role in reducing maternal mortality as they are often the first level of contact for most women. Unfortunately, these cadre of staff are yet to be educated on the dangers of unsafe abortion - how to recognize the symptoms and signs of abortion and to institute simple treatment measures. The village health workers are selected by the community and are trained to provide essential preventive, promotive and curative health care in the community. This scheme has been identified as the most pragmatic approach in solving the problem of geographical accessibility and the lack of health facilities in rural areas.

Manpower Statistics in Nigeria

The statistics in December 1986 were as follows:

- 1) Total number of registered doctors - 16,003
Doctor Population ratio - 1: 6500

This includes 6000 doctors who left the country as a result of the present economic difficulties.

- 2) Total number of registered nurses - 50,946
Total number of registered Midwives - 42,423
Nurse/Midwife Population ratio - 1: 2000
- 3) Total number of Extension workers - 22,000

Although Physicians and trained Nurse/Midwives are in short supply and are mostly concentrated in the urban areas, the efforts of the Federal Ministry of Health under the able leadership of Professor Olikoye Ransome-Kuti in ensuring even distribution, coverage and effective service delivery is commendable. With the National Health Policy and the effort of the coordinating Units of the PHC Unit coupled with the assistance of various international organizations, it is hoped that all levels of the health care system would be able to adopt effective strategies to improve their services. Furthermore, the role of each category of health care provider

should be strengthened in health education, counselling referral and clinical management. In particular, the management of the five major obstetric complications causing maternal deaths should be improved in order to reduce the associated high rate of maternal mortality. It is my sincere hope that all hands will be put on deck in efforts to improve the system.

As the Honorable Minister of Health once said and I quote:

" That is what we must plan and work for with diligence, perseverance and determination. It may not happen totally in our time but we must lay the foundation and set the pace to the extent that it cannot be reversed or allowed to degenerate to the hopeless state they were". A case for inclusion of abortion services into the various levels of care must be seriously considered.

I thank you all for listening.

HEALTH CARE PROVIDER'S ATTITUDE TOWARDS ABORTION

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Discussion on issues related to abortion are ever so controversial. The voices of both the protagonists and the antagonists often drown each other leaving the issues imprecise. With the

overwhelming statistics shown by Professor Briggs in his paper on the epidemiology of abortion and Dr Okonofua's presentation on the clinical consequences of unsafe and induced abortion, one would have thought that the issues are clear enough for there to be a radical change in the abortion law in Nigeria. It could be said that the general public including the government and religious organizations, not fully aware of these facts, can be forgiven for their tenacious negative attitude towards legalization of abortion. However, the same cannot be said of health care providers who are daily confronted with the severe complications of unsafe and induced abortion. It is possible that short human memory may relieve us of the sad picture once we are away from the scene.

There are certain fundamental factors that influence the attitude of the average Nigerian towards abortion. The most important among these is religion. Whether religion is an index of our sincerity, honesty or the need to protect the unborn fetus is not entirely clear. Part of the reason for this assertion is the willingness of parents to secretly procure abortion for their daughters if they have unwanted pregnancies so as not to disgrace the family or disturb the education or future of their children. Such parents will however publicly denounce any attempts to legalize abortion. Another confusing picture is the readiness for highly placed individuals to seek abortion privately for their mistresses but to strongly oppose any official moves to liberalize the abortion law. The picture is so contradictory.

An assessment of the health care providers in Nigeria indicate that they can be broadly classified into Liberals and Conservatives with regard to their attitude towards abortion. The Liberals can be further subdivided into radical liberals, who support abortion on demand and the conservative liberals who support selective abortion. The conservatives are those who will not support abortion irrespective of the indication for the abortion. They base their opinion on medical ethics and the Hippocratic oath which stipulate the necessity to uphold the sanctity of human life from the time of conception. The liberals on the other hand, base their support for abortion on the equally important need to protect the life of the mother who is at risk of dying from unsafe abortion and the necessity to preserve women's rights to free choice.

A survey on the attitude of health care providers towards abortion conducted on the first day of this seminar among some of the participants highlight some of the problems I have discussed above. It was not known to the participants that the outcome of the survey was going to feature as a presentation in the seminar. Thirty five of them were interviewed consisting of 6 gynecologists, 11 Obstetrics and Gynaecology resident doctors and 18 senior medical students who had completed their rotation in Obstetrics and Gynaecology.

They were asked questions on their attitude towards induced abortion, thus:

- 1). Do you support abortion on demand?
- 2). Do you support therapeutic abortion only?
- 3). Would you support therapeutic abortion as well as abortion in such special circumstances as

rape or incest?

4) What is your reason for the above answers : religious reasons, government policy on abortion, Women's rights or professional consideration?

The results showed that 13(37%) supported abortion on demand, 15(43%) supported therapeutic abortion and also supported abortion in special circumstances. Their decisions were based on religious considerations (31.4%), women's rights (11.4%) and professional considerations (57.1%).

The results of this survey, although limited in its wider applicability, suggest that only a fraction of Nigerian professionals support abortion on demand. The health practitioners tend to favor wider indications for abortion but not blanket approval, implying that most professionals are conservative liberals. Unfortunately, this means that quacks and non-professionals will continue to perform abortions and cause undue harm to women. If we are to reduce morbidity and mortality from induced abortion in the present climate of a restrictive abortion law, health care providers must become much more radical in their attitude towards abortion.

DISCUSSION

During the discussions that followed Dr Ojengbede's presentation, it was suggested that there is a need to differentiate between women who seek abortion having defined their pregnancies as unplanned and inconvenient and those who view their pregnancies as socially unacceptable, for the purpose of counselling. This is because the latter group are usually desperate young girls more likely to resort to dangerous methods of abortion. Furthermore, it was pointed out that the popularity of the backstreet abortionists lies in the discretion and relatively "accepting" atmosphere offered there particularly to the latter group of abortion seekers. Health care providers in government hospitals and clinics, it was pointed out, often exhibit negative and judgmental attitudes towards abortion seekers. Most participants agreed that the attitude of providers is a critical factor in determining where women go to for abortions. The need for attitudinal change amongst health care personnel was thus recognized as being very important.

The point on the attitude of health professionals was further discussed after Dr Onwudiegwu's presentation. Most participants agreed on the importance of the attitudes of providers in improving access to and availability of safe abortion services in the country. Reference was made to a survey similar to the one reported by Dr Onwudiegwu, which was conducted at a recent annual conference of the Society of Gynecology and Obstetrics of Nigeria, where it was found that 25% of members who participated in the survey were against abortion.

The point was made by a speaker that it was important to take into account the attitudes of all health care providers and not just doctors. Some participants, however, felt that deeper issues such as the existence of co-ed schools and the promotion of promiscuity in the media need to be addressed.

Most participants however, agreed that many health care providers need to change their attitudes towards abortion and to refer patients to their colleagues if they prefer not to carry out the procedure.

Following Mrs Delano's paper, the discussion centered around the problems of manpower shortages and access to services, including attitudes of providers and the lack of anonymity, which might prevent many people from using the health facilities available even when they are improved. Concern was expressed by some participants at the government's failure to control the dangerous activities of some religious organizations with regards to health care delivery. The case of some churches which purport to provide health care services including the delivery of babies in their premises was cited. The point was made that if the government is unable to control the activities of unprofessional abortionists, they should legalize abortion and provide facilities for the safe termination of pregnancy in their health institutions. This would seem to be the only measure that will effectively curtail the activities of the backstreet abortionists.

The need for emphasis to be placed on preventive services such as family planning services and information and counselling on abortion was once again emphasized. The importance of re-examining the content of family life education and of having people who are comfortable with their own sexuality to provide information and counselling, especially to young people was also highlighted.

It was suggested that the root causes of manpower shortages, especially the exit of trained nurses and doctors from the country in search of work in other countries must be addressed. The point was also made that doctors contribute to lopsided manpower allocation by opposing the delegation of simple tasks and by paying inadequate attention to the training of para-medical staff. Trained medical personnel it was said, are not necessarily trained abortion providers; the issue is not whether or not providers are doctors but whether they are properly trained to provide care to certain levels and to refer cases for more specialized care. It was also suggested by a speaker that "quacks" in the community who are known to provide unsafe abortion services should be identified and dealt with according to the law.

The importance of providing contraception to high risk groups such as adolescents in government hospitals and clinics was noted. Some participants expressed the view that lack of social discipline, and moral laxity in society are core problems in the society and to provide such services would be tantamount to legalizing the problems.

Finally, the point was made by the presenter that governments - both states and federal - should see themselves as monitors to evaluate programs, not implementers, in order to encourage a better system and to guarantee responsive health care programs.

A short response and presentation was made by Dr Chiori, the Director of Hospital

Services and Training of the Federal Ministry of Health who was there to represent the Federal Minister of Health. He stated that the role of the Federal Government is to make policy, set standards for and motivate the States and other levels of the health care system who are the main implementers of programs. The Federal government may initiate and set a program in motion but leaves maintenance of such programs to the States.

The Federal government has recognized, he said, the importance of the referral centers and is very concerned at the moment with equipping them. Necessary facilities required at the tertiary level of care have been identified and documented by the Federal Ministry of Health. The problem now is to obtain funds to provide those facilities.

On the provision of contraception, Dr Chiori noted that the Federal Government does not aim to be a provider/implementer; and that the government is not aware of the shortages of commodities referred to by Mrs Delano. He noted the concerns expressed and promised that the problem of such shortages will be investigated and corrected.

Dr Chiori noted that many doctors object to non-physicians providing oral contraceptives and yet doctors are not sufficient in the country to guarantee adequate provision of services to all areas. He outlined the problems the ministry is having in trying to encourage NYSC doctors to remain in rural areas after their service year to train community level workers. According to him, inducements such as mopeds and improved salary structure have been offered but the attitudes of the doctors, many of whom are seeking quicker avenues to wealth have rendered such measures ineffective. Also, many doctors prefer to be posted to the urban areas and lobby to change their posting when they are posted to the rural areas. He appealed for the cooperation of the profession as well as families to arrest this trend.

Dr Chiori noted that the contribution of the private sector to the health care delivery system is presently estimated to be 60%. The ministry, he said, recognizes the importance of their contribution and had set up a committee including retired private practitioners to further examine and make recommendations on how this contribution can be improved.

CHAPTER 3 : TECHNOLOGIES IN ABORTION CARE

MANAGEMENT OF INCOMPLETE ABORTION WITH MANUAL VACUUM ASPIRATION

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International Projects Assistance Services

I wish to congratulate the organisers and the funding agency of this very important seminar. At one of the pre-conference consultative zonal seminars on Safe Motherhood organised by the Society of Gynaecology and Obstetrics of Nigeria (SOGON) in 1990, the President of the Society who is here with us today, after highlighting the alarming nature of the problem of maternal mortality through statistics, asked why young women were being allowed to die prematurely for wanting to keep our specie alive. He went further to state that the Nigerian situation was worse than that of most developing countries and he inferred that " there is

something we are not doing right in Nigeria". He then stated that SOGON in collaboration with other organizations nationwide, has decided to "seize the bull by the horn and do something to stop our women from dying unnecessarily".

I see this seminar therefore as timely, a response to the challenge thrown by SOGON and a very significant contribution to the prevention of maternal mortality and morbidity in this country.

International Projects Assistance Services

Since the International Projects Assistance Services (IPAS) is the organization that formally introduced Manual Vacuum Aspiration (MVA) as a gynecological technology to the developing World including Nigeria, it will be appropriate that I give some information on its activities. The fact that induced abortion ranks high among the five major causes of maternal mortality and morbidity is well documented. The rate is much higher in developing countries and this has been a source of concern to various international organizations. For example, the World Health Organization has focussed worldwide attention on unsafe abortion as one of the leading causes of maternal deaths at several of its International Meetings some of which include :

- 1) International Meeting on the Prevention of Maternal Mortality (1985).
- 2) The International Safe Motherhood Conference (1987).
- 3) The International Conference on Better Health for Women through Family Planning (1987).
- 4) The Christopher Tietze International Symposium on Women's Health in the Third World: The Impact of Unwanted Pregnancy (1988).

IPAS an international non-profit organization situated in North Carolina, USA, focusses primary attention on women's health and has interacted and collaborated with the WHO on these issues. It addresses a global issue critical to women's health i.e. the problem of post-abortion care since the 1980s. It believes that safe abortion care should be available and accessible to every woman, that the care should be delivered within the framework of comprehensive reproductive health care and that the care should include comprehensive family planning counselling and services. IPAS' primary focus is on the health care problems associated with unsafe abortion, particularly on reducing maternal mortality by improving the clinical and management aspects of abortion care and increasing women's access to that care.

In order to achieve these aims, the following conditions must be met, thus :

- 1) Availability of appropriate abortion care technology
- 2) Availability of essential and appropriate equipment, supplies and medications.
- 3) Technical competence.
- 4) Interactions between the women and the service providers.
- 5) Information and Counselling.
- 6) Post-abortion Family Planning and reproductive health care.
- 7) Access to care.

It is against this background that IPAS has set out to achieve its objectives. IPAS has established training centers in the use of MVA technology at the University Teaching hospitals in

Kenya, Zimbabwe, Latin America, Romania and Nigeria to mention a few.

In Nigeria, IPAS started its life-saving work in 1987 and had training centers in four teaching hospitals - Zaria, Enugu, Lagos and Port Harcourt - until the end of 1990. From the beginning of 1991, IPAS has expanded, and now the project sites in Lagos and Zaria have been made regional training centers for other hospitals. In another week or two, doctors and nurses from 6 teaching hospitals and 7 State hospitals would have been trained. In fact, Kaduna State has sent a core of trainers to start the training of other doctors and nurses in their state. MVA is gaining grounds - there have been requests for training from individuals, from the public and private sector and numerous institutions including the Army and the Navy. This information may be of interest to many of the participants at this seminar; I will be willing to have further discussions on it.

With 32 staff based in North Carolina, 12 Consultants in the developing World and a not too buoyant budget, IPAS is the leading provider of equipment, information including educational materials and training related to the provision of safe abortion care.

MVA - the Medical Technology for Abortion Care

One of the strategies for achieving the aims of IPAS is training in the use of MVA as a procedure of choice in the treatment of incomplete abortion. The WHO in one of its publications, recommended MVA as the procedure of choice for the treatment of incomplete abortion. As the name implies, it is used for evacuating the contents of the uterus by creating sufficient vacuum manually as against that created by electricity. However, that is not the only use - it is also used for endometrial biopsy and for the termination of pregnancy that is 12 weeks gestation or less.

MVA is an appropriate equipment in places like Nigeria where electric power supply is not available in all areas of the country or even where it is available, is not dependable due to frequent power cuts. MVA is appropriate for use in rural health centers where theater facilities are not available and where experienced nurses and midwives are often in charge. Frequently, cases of incomplete abortion are taken to these centers and many die due to delay in treatment since these cases would have to be transferred to the hospital. We are all familiar with the hazards associated with such transfers particularly if they happen at night.

The MVA kit consists of the Karman syringe and various sizes of sterile cannulae. There are two types - the single valve and the double valve, both made of high quality plastics. The syringes are of the same 60 cc capacity and are designed as a locking vacuum syringe. The double locking valve of the double valve syringe produces a greater vacuum than that created by the single valve. The single valve is suited for endometrial biopsies and for evacuation of products of conception from an incomplete abortion of 12 weeks or less. The cannulae range from sizes 4mm to 6mm and are attached directly to the nozzle of the syringe. The piston of the syringe has two arms which, when drawn out, rest on the flanges of the barrel. A plastic piece of valve with an inner rubber lining fits into the nozzle of the barrel. This attachment is used when creating or releasing vacuum in or from the syringe. The mechanism is the same for the double valve, but because it uses both the smaller and the larger diameter cannulae, it is fitted with

adaptors which are of different colors. The double valve is used for the cases that present after 12 weeks gestation. Each package is accompanied with a small quantity of silicone.

The procedure is simple once the woman has been properly positioned and the cervix is held securely in position. The canula is then introduced into the cervical canal. The vacuum that is then created, is released sucking up the contents of the uterus. By rotatory movements of the canula and the syringe, the uterus is emptied of its contents. The entire procedure is aseptic and the doctor performing the procedure must endeavor to maintain asepsis. I say this with all due respect because the procedure is so easy and takes such a short time that there is a great tendency to overlook that aspect of the procedure.

Preparation for MVA

This includes setting of the trolley and preparing the client physically and psychologically.

Trolley : Although this is usually the responsibility of the nurse, yet, I believe the doctor should also know about this just in case the nurse is not available. Even when a nurse is available, I believe the doctor ought to be able to ascertain that the trolley has been properly prepared. Rules of cleaning the trolley and of asepsis should be applied when setting the trolley. Instruments should be arranged to allow for the smooth flow of equipments so that the surgeon would not have to stretch over items and thereby contaminate them. The bottom shelf should contain a receiver for used instruments, a specimen jar and a bowl on wheels for collecting used swabs, blood and gauze.

The Client : The fact that the woman has been bleeding is sufficient cause for fear and apprehension. When an unexplained procedure is added to this, her level of anxiety increases with a tendency for lowering of the pain threshold. Regardless of her condition on arrival in the hospital, she should be reassured and prepared psychologically. As stated previously, it is the belief of IPAS that abortion care should include good rapport between the patient and the medical staff as well as a comprehensive family planning counselling program to reduce the need for abortion.

It is therefore imperative that any doctor who decides to use MVA gives family planning counselling as part of the post-operative care. The doctor should not assume that the nurse will take care of that aspect. In fact, it is good for both the nurse and the doctor to counsel the patient at various times. In one of the IPAS project sites, there is a poster which reads - " Have you counselled your patient?" displayed at the place where the doctor stands to complete the log book. In the same clinic, family planning service is given to patients who need to prevent pregnancy even for short periods.

Cleaning, Maintenance and disinfection of MVA Equipment

The efficiency of the equipment and its life span depend on the care given to it. The following steps are suggested :

1) Wear gloves and dismantle the syringe after use and clean as follows :

- a) Take the used syringe and canula and flush them out with water ensuring that blood and any

tissues are removed.

b) Take the syringe apart i.e. remove the collar stop, then gently remove the piston from the barrel to avoid breakage of the neck or any part of the piston.

c) Remove the black O-ring from the round end of the piston.

d) Remove the valve set with the rubber lining.

2) Wash all these pieces thoroughly in soapy warm water. Use a small brush to remove any tissue or blood clot. Rinse them in clean water as often as necessary. Check for cracks or any damage in the syringe.

3) Prepare a 2.2% solution of sodium hypochlorite (1:10 solution of household bleach) and submerge the pieces in this solution for at least 10 minutes but not more than 20 minutes.

4) Remove the items from the solution and rinse them thoroughly in boiled water.

5) Spread a dressing towel on a trolley and spread the rinsed items on it to air-dry completely. Remove your gloves.

6) Replace the O-ring into the piston neck and put a drop of silicon on it to lubricate it.

7) Re-assemble the syringe and move the syringe up and down the barrel to distribute the silicone in the barrel.

8) Check the syringe for vacuum tightness. The method is to close the valve by pressing the pinch and pulling out the piston with its arms resting on the flap of the barrel. This creates the vacuum. Leave the syringe in its position for 2 - 3 minutes, then release the pinch valve. You should hear a rush of air into the syringe. This indicates that the syringe maintains the vacuum. If you do not hear the rush of air, then lubricate the O-ring again and repeat the test. If there is still no air rush, change the O-ring. If there is no change, the syringe should be discarded. Store the syringe away in a covered tray or in an instrument cupboard after the testing.

Disinfection /Sterilization of the Canula

The canula should be sterilized by cold sterilization because it is plastic.

1. The canula is first held under running water. This is followed by washing in warm soapy water to ensure the removal of any organic matter and blood clots. It is then rinsed in warm boiled water. The gloves are now removed followed by checks for cracks and breaks at the tip of the canula. If any of this is present, the canula should be discarded.

2. Sterilize the canula in 2% glutaraldehyde (CIDEX) for not less than 10 hours. Remove sterilized canula with sterile forceps and rinse thoroughly in sterile water while allowing the water to run out of the tip. The solution can be re-used.

3. Dry the cannula between sterile towels.

4. Store in a sterile instrument tray with cover. There is no need for re-sterilization before use.

Point on Sterilization of Equipment and Sterilizing Agents

It is not necessary to sterilize the syringe because it does not come in contact with the cervix or the uterus. However, it should be disinfected in 1 - 10 bleach solution for at least 10 minutes and rinsed before each use. A fresh solution must be prepared each day.

I know that Cidex is very scarce and quite expensive. Because of this, sodium

hypochlorite 5.25% has been suggested for use for both syringes and cannulae. Studies have shown that it has a broad spectrum of antibacterial action including tuberculocidal, bactericidal, fungicidal, virucidal and sporicidal activities. It acts against HIV and hepatitis viruses when left for 20 minutes to achieve high level disinfection (HLD). A contact time of 10 - 20 minutes has been documented to achieve high level disinfection.

Sodium hypochlorite is not without some disadvantages : it is corrosive and irritant to the eyes and skin. It is relatively unstable and therefore becomes less effective with time. This is why a fresh solution must be prepared everyday and changed during the same day if the solution becomes cloudy. The time when disinfection is started should be written and left by the tray to avoid insufficient disinfection time when nurses change shifts.

The benefits of proper disinfection accrue both to patients and the nursing staff. For example, it will lower the risk of spreading STDs and the HIV virus to other patients. Proper procedure will lower the risk of spreading the same diseases to medical staff through the use of intact gloves.

Other solutions and concentrates that should not be used for disinfection of the syringe and canula are:

a) Iodine - this causes plastics to become brittle and discolors it.

b) Concentrated Savlon - savlon is an antiseptic and must not be used as a disinfectant.

Unfortunately, many doctors and nurses use savlon as a disinfectant.

Unless an antiseptic contains 70% alcohol, it will not be effective in destroying all bacteria and viruses. IPAS MVA kit usually contains many canulae which are sterile before use and unless there is a very heavy load of cases, the used ones can be disinfected and ready for re-use on the same day without causing delay.

Advantages of MVA

They are many and include the following :

1. It is a safe method for reducing complications of incomplete abortion such as hemorrhage, sepsis and uterine perforation. Even when undue force is applied on the canula, it will bend over itself rather than perforate the uterus because of its flexibility. This is a great advantage over the metal curette.
2. It reduces the delay in the treatment of incomplete abortion that occurs with the D and C method. This is because it can be done on an outpatient basis thus, ensuring that cases are treated early. In contrast, D and C is usually done in the theater and requires an anaesthetic.
3. It is cost-effective both to the patient and the institution as it removes costs due to prolonged hospitalization and the use of antibiotics and anesthetics.

Conclusion

I report here a study organised by IPAS and jointly carried out by Professor O.A. Ojo, retired head of the department of Obstetrics and Gynaecology of the University Teaching Hospital, Ibadan and now a consultant with IPAS and Mr Frank Phido; and a paper from the case report forms used at the Ahmadu Bello University Teaching Hospital and the Lagos University

Teaching Hospital, jointly prepared by Professor O.F. Giwa Osagie and Dr O.K. Ogedengbe. The findings are identical and give credence to the views that I have shared with you in this paper.

In the evaluation study on MVA use following training, the findings include the following

:

- The use of MVA for the treatment of incomplete abortion increased from 19% to 74%.
- 56% of those who were trained in the MVA course later trained their colleagues.
- 100% of the sites offer family planning counselling and services to incomplete abortion patients.

During the interviews, both positive and negative comments were made about MVA. The positive comments were that MVA 1) is safe, cost-effective and has low complication rate, 2) can be performed in out-patient setting, 3) reduces morbidity and mortality from incomplete abortion, and 4) provides avenue to educate patients about family planning. Many of the respondents also said that patients prefer MVA to D&C.

The negative comments were as follows:

1) MVA requires training. I do not regard this as a negative comment except if it is considered from the point of view of the difficulties often encountered in obtaining information and contacts for training. Fortunately, the situation is changing now that some States are getting involved in training.

2) Barriers to widespread MVA training and use were mentioned. There is the problem of shortage of trained staff. Money was also mentioned but since I do not have an explanation, I do not know what it is supposed to mean. However, from my experience, having an MVA procedure room set up in any clinic does not involve money. It costs far less than many other equipment, especially those used for D&C.

3) Limited authority to treat abortion complications and to train others. This was mentioned particularly by nurses. My view is that if doctors have a blanket or generalized view about this without making exceptions for certain cadre of nurses who have adequate experience, women will not have access to abortion care particularly in rural areas where there are often no doctors. This will negate the efforts to reduce abortion-related maternal mortality, for which reason the procedure is being advocated in the first place.

4) Equipment is not widely available outside metropolitan areas.

IPAS has been particularly concerned about this. Fortunately, we seem to have reached some solution and IPAS has stepped up its efforts in several areas. For those who are interested, there are these two additional contacts in Lagos :

1) Dr Kalu
50 Cole Street
Surulere, Lagos

2) Mr I.O. Moradeyo
Femope Ltd

87 Palm Avenue, Papa Ajao
PO Box 1543, Lagos.

The respondents made the following recommendations :

- MVA should be instituted in General Hospitals and primary health centers when trained staff, equipment and supplies are available.
- Trained Nurse-Midwives should be allowed to use MVA.
- Ministries of Health and Health Management Boards should make MVA equipment widely available. I am sure this is a very important recommendation because unless there is an opportunity to practice a learned skill, not only will the skill be forgotten, but will also be impossible to teach to colleagues.
- There should be MVA training throughout the country. Those who are present at this seminar can assist in spreading the news towards making it possible in every state.
- Improve access to family planning services.
- Liberalize the abortion law.

These are some quotes from statements made by some of the trainees:

" Very effective.....I have not bothered with other methods after learning the magic of MVA".

" MVA will reduce the need for highly skilled personnel at the primary health care level to treat cases of incomplete abortion".

" I would recommend MVA training to colleagues because it is very safe, saves cost, reassures patients and preserves future procreation".

Some patients also had some comments about MVA, which include that they were 1) pleasantly surprised at the brevity and relative safety, 2) impressed with the lack of complications and 3) pleased at the absence of pain and little blood loss.

The clinical needs and resources used in the management of incomplete abortion have been documented at the project sites in Lagos and Zaria. MVA was found to be a simple technique for treating cases of incomplete abortion in early pregnancy and for other simple procedures as endometrial biopsy, therapeutic termination of pregnancy and the treatment of hydatidiform mole.

The finding that all types of practitioners performed MVA with equal safety, lends support to the need for training non-specialists to perform the procedure wherever possible. This will facilitate decentralization of abortion care and make the procedure easily accessible to women in the rural areas. Perhaps the most important positive influence is the additional provision of post-abortion family planning services to this group of women, many of whom are at risk of future unwanted pregnancy.

Ladies and gentlemen, I thank you for your attention. I also thank the organisers for giving me the opportunity to give a detailed information on MVA. It is my hope that this seminar achieves its objectives and that it does not stop at creating the awareness or mapping out the

strategies for action, but that it will be further assisted in implementing them.
Thank you all.

References

1. Society of Gynaecology and Obstetrics of Nigeria (SOGON): Safe Motherhood Initiative 1990 : Reducing Death and Disability From Pregnancy and Childbirth : Report on Zonal Pre-conference Consultative Seminars, Vol. 1.
2. IPAS: Women's health initiatives - Strategy for action in the next decade, August 1991.
3. IPAS: Nursing Manual for abortion care, 1990.
4. Tubi AM: Unpublished notes.
5. Ojo AO, Phido F: Evaluation of Manual Vacuum Aspiration Training Programs and Subsequent Clinical use of the procedure at Ahmadu Bello University Teaching Hospital and Lagos University Teaching Hospital, Nigeria. Report to IPAS, July 1991.
6. Ekwenpu CC et al : Clinical treatment needs and family planning use among women treated for incomplete abortion in teaching hospitals in Nigeria, September 1991.

NEW TECHNOLOGIES IN TERMINATION OF PREGNANCY

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Induced abortion or termination of pregnancy is an old procedure. Forcible or manual dilatation of the cervix followed by uterine evacuation with vacuum aspiration remains the commonest method for first and second trimester abortions. Application of good general surgical principles to this method of pregnancy termination has improved the safety, efficacy and acceptability of the method.

Methods of preparing the cervix have continued to be refined to avoid or reduce the complications attributable to forcible or manual dilatation of the cervix. The use of hydrophilic dilators (laminaria) and prostaglandin analogues to prepare the cervix has generated new interest. The new synthetic hydrophilic dilators (dilapan, lamichel) produce cervical dilatation faster and have reduced the chances of sepsis compared to the natural laminaria.

The new medical methods involve the use of antiprogestins (epostane, RU486) and prostaglandin analogues (gemeprost, sulprostone and 19-methylene PGE₂). These drugs produce complete abortion in early pregnancy (3-4 weeks) following the first missed period. Used alone, the antiprogestins are not as effective as vacuum aspiration for inducing abortion in early pregnancy. When used in combination with the PG analogues, these drugs have been shown in several studies, to compete with vacuum aspiration for the termination of early pregnancy.

Termination of pregnancy can be achieved by surgical and medical methods. While new developments have been made in the medical methods, the surgical methods have witnessed improvements in instrumentation and safety of the methods. It is important to mention a few milestones in abortion technology in this paper but detailed history of abortion technology have been reviewed by Hodgson (16) and Stubblefield (30).

The operation of dilatation and curettage or uterine evacuation remains the major surgical method for the termination of pregnancy. Often referred to as the only blind procedure in gynaecology, it is an ancient operation. Forcible dilatation of the cervix with Hegar's dilators followed by digital evacuation of the uterus instead of the blind introduction of ovum forceps and curette alone, is mentioned in the early edition of William's Obstetrics (37). The instruments used to scrape the uterine cavity have been described by early Roman and Greek authors (12).

The development of the vacuum curettage was the most significant progress made in the 20th century in abortion technology. Kerslake (18) introduced this procedure into the UK in 1960 although the procedure had been in widespread use in China, USSR and Yugoslavia. Kerslake's uterine aspirator was brought into the USA through the efforts of the Lalor Foundation (31).

Karman and Potts (17) devised a small plastic cannula combined with a modified 50 ml syringe as a vacuum source. This device which became known as Karman syringe, allowed early vacuum aspiration without cervical dilatation. This device allowed early abortions in many countries (2).

Laminaria, a cold water intertidal seaweed have also been used in traditional medicine for cervical dilatation. The developments in the medical methods are more recent. In 1982, a team of French scientists at Ronssel Uclaf discovered RU 486 (an antiprogestin) which could be used to terminate early pregnancy in women.

Surgical Technique of Pregnancy Termination

Although the operation of cervical dilatation and curettage is old, vacuum curettage is a fairly recent innovation and is the most often performed procedure for termination of first trimester pregnancy. The procedure is safe and highly effective but complications are related to both gestational age, surgical and anaesthetic techniques (14,23). The complications of the procedure can be reduced by applying the general principles of good surgical techniques to termination of pregnancy. These techniques include pre-operative evaluation, a high level of operator skill, good sterile technique, atraumatic surgical technique, thorough removal of devitalized tissue and careful post-operative supervision and follow-up.

A vaginal examination is done and a pregnancy test to confirm pregnancy is requested. Ultrasound examination has almost become routine even in developing countries. Ultrasound is indicated when there is a discrepancy between gestational age by physical examination and that calculated from the date of the last menstrual period. It will provide information on multiple gestation, uterine anomaly, uterine fibroid and ovarian tumors. A packed cell volume estimation and Rhesus blood typing are mandatory. Where facilities exist, a Papanicolaou smear, culture for gonorrhoea and serological tests for syphilis may be taken.

Rhesus negative patients should receive anti-D immunoglobulin immediately after the termination. Prophylactic antibiotics are used in most abortion clinics. Schulz et al (27) have shown in the USA, that prophylactic antibiotics used in abortion clinics have resulted in a significant reduction in infectious complications of pregnancy termination. The synthetic tetracycline, doxycycline and minocycline are recommended for use as broad spectrum antibiotics.

Surgical termination of pregnancy requires that the operator be skilled in the procedure to reduce the rate of complications. The procedure must be properly taught to medical practitioners and resident doctors. Seeing a few done and doing a few, does not guarantee competence. Good sterile technique is also important; the use of sterilized specula, autoclaved instruments, sterile gloves, facemasks, go a long way to reduce the contamination of the uterine cavity. Care must be taken to reduce trauma during the procedure. To achieve this, the best precautionary measures must be taken during cervical dilatation and uterine evacuation.

Preparation of the Cervix

Laminaria : These are cold water seaweeds whose slender stem swell to about four times their diameter when placed in water. Laminaria tents also extract water from the cervical canal and

they dilate the cervix by applying radial force to the canal. Their use prior to first and second trimester abortions have been shown to decrease the incidence of cervical trauma and uterine perforations (27). Laminaria had the disadvantage that it could not be completely sterilized to remove all bacteria spores and that they worked rather slowly. To overcome these disadvantages, new synthetic dilators were introduced. A polyvinyl alcohol sponge containing 450 mg magnesium sulphate (lamicel), a hydrogel polymer (hypan), and a hypan dilator (dilapan) are some of these synthetic hydrophilic dilators. They offer rapidity of cervical dilatation and complete sterilization. There is certainly a renewed interest in ethylene oxide sterilized laminaria for cervical dilatation.

Prostaglandins (PGs)

Liggins (20) has shown the effect of prostaglandins on the cervix in preparation for induction of labor. Subsequently, prostaglandins have been used for cervical dilatation to permit termination of pregnancy (9,29). The dose of prostaglandin required to dilate the cervix for abortion is much smaller than that needed to produce uterine contractions. As a result, the well known systemic side effects such as vomiting, diarrhoea, and fever are reduced with the cervical use of PGs. New vehicles such as suppositories, pastes and gels facilitate local abortion. Among the PGs used for cervical ripening, are 15 methy F2a (22), 16.15-dimethyl E2 and 15 methyl E1 (35) and E2 gel (38).

Forcible or Manual Dilatation of the Cervix

Forcible or manual dilatation is the most commonly performed as the sole method of cervical dilatation. As most serious perforations occur during the manual dilatation of the cervix, this procedure must be conducted carefully. The procedure will now be described in some details.

Patients coming for the procedure should be instructed to have nothing to eat by mouth after midnight of the day of the procedure. The patient should be instructed to empty her bladder before entering the theater. In most cases, a systemic analgesic (pethidine and diazepam) and paracervical block are used. General anaesthesia is reserved for very young girls or extremely nervous patients. The patient is placed in the lithotomy position and pelvic examination is performed. The accurate diagnosis of uterine position is critical. Failure to appreciate a retroverted or an extremely anteverted uterus may result in perforations. An appreciation of the correct uterine position enables the operator to introduce instruments along the correct axis. A speculum is introduced into the vagina and the cervix is exposed. The cervix and vagina are prepared with local antiseptic solution (povidone iodine; bethadine). Local anaesthetic infiltration of the cervix is then carried out. Atropine 0.4 mg is given to prevent vasovagal shock. 1% lignocaine is used for local infiltration. The anterior lip of the cervix is infiltrated first and then a tenaculum is applied to the anterior lip vertically, at 12 o'clock. Then superficial or deep infiltration carried out at 3 and 9 o'clock would complete the block. Local anaesthetic in a total dose of 20 - 30 mls are used (31). A gentle passage of the uterine sound through the cervical canal to the uterine fundus assists in determining the direction of the canal and the uterine size. Some operators oppose this step because of the possibility of perforation of the soft pregnant

uterus.

The stepwise dilatation of the cervical canal now follows. Dilators with tapered ends, made of steel (Pratts) or autoclavable plastics (Denniston) are favored. Hegar dilators are blunt at the ends and may cause laceration of the cervix. Introduction of the dilators into the cervix should be slow and careful, allowing time for the cervix to stretch. Dilatation is continued to a diameter 1mm less than the gestational age in menstrual weeks. Undue force must be avoided with the use of dilators. A dilator should be held gently between the thumb and the first finger as one would hold a pen. This grip permits maximum sensitivity and also permits the dilator to slide through the fingers rather than perforating the uterus when the fundus or the side of the uterus is reached. When dilatation is complete, the vacuum cannula is introduced.

Vacuum Source

Vacuum can usually be established by withdrawing the plunger of the Karman syringe or switching on the electric pump. The choice of the vacuum cannula depends on the gestational age. For pregnancy prior to 8 weeks, the flexible 6mm Karman cannula can be used and no cervical dilatation may be required. For pregnancy 8 weeks and beyond, the standard rigid canulae are required. The number of suction curette corresponds to the diameter of the curette in millimeters. It is always advisable to use a suction curette of a smaller number than the number of gestational weeks.

Medical Methods of Termination of Pregnancy

An early pregnant uterus is relatively inactive. Csapo (11) proposed that the degree of activity depends on a balance between the intrinsic suppressor action of progesterone and the stimulatory effects of prostaglandin F₂.

It has long been thought that an antiprogestone could prevent or terminate a pregnancy. It was not until 1982 that French workers led by Herman (15) announced the discovery of a new compound, RU 486, that was effective in terminating an early pregnancy. The "abortion pill" as it came to be known in the lay press has since undergone numerous studies around the world. The antiprogestins comprise two categories of drugs. These are the progesterone synthesis inhibitors such as epostane and the progesterone receptor blockers such as RU 486.

RU 486 acts on the progesterone receptor of endometrial and decidual cells and this results in detachment of trophoblast and the conceptus (5). Epostane, an inhibitor of 3 β -hydroxysteroid dehydrogenase, blocks the conversion of pregnenolone to progesterone as well as that of dehydroepiandrosterone to androstenedione (24). The withdrawal of progesterone caused by epostane or RU 486 converts the early quiescent uterus into an organ of spontaneous activity and reactivity. It has also been shown that myometrial activity in response to endogenous and exogenous PGs but not to oxytocin also increases following epostane treatment (34).

As a result of the above findings, several studies have been conducted into the efficacy, safety and acceptability of antiprogestins alone, PG analogues alone, or the combination therapy with sequential administration of antiprogestins followed by PG analogues. The new PG analogues have a selective effect on the myometrium and have a greater resistance to in vivo

enzymatic degradation by prostaglandin-15-dehydrogenase. 16,16-dimethyl-trans-delta²-PGE₁, methylester (gemeprost) and 9-deoxy-16, 16-dimethyl-9-methylene PGE₂ (9-methylene PGE₂) are administered by the vaginal route while 16-phenoxy-tetranor PGE₂ methyl sulfonamide (sulprostone) is administered intramuscularly.

These medical methods can only be used for termination of early pregnancies - i.e., 3-4 weeks after a missed period or after 7-8 weeks of amenorrhoea. Their ability to induce complete abortion declines drastically at later stages of gestation. In a comparative study of the three PG analogues, the frequency of complete abortion varied between 92% and 94%, while the percentage of women in whom pregnancy continued was 4% or less in all the three groups (4). In another comparative study (7), three different regimens for termination of early pregnancy (less than 56 days of amenorrhoea) were compared with vacuum aspiration. Complete abortion occurred more often in women treated with vacuum aspiration (96%), gemeprost alone (97%) and RU 486 plus gemeprost (95%) than in those treated with RU 486 alone (60%). They also showed that the dose of PG vaginal pessary could be reduced 5-fold without loss of efficacy when used in combination with RU 486.

In a multicentre study conducted by the WHO (36), 473 women with amenorrhoea less than 49 days were randomly allocated to treatment with vacuum aspiration or repeated intramuscular injections of sulprostone (3 injections of 0.5mg at 3 hourly intervals). 91% of the PG treated group had complete abortion compared with 94% in the vacuum aspiration group.

RU 486 given alone for the termination of pregnancy of up to 8 weeks duration results in complete abortion in 60% of cases but a higher success rate of up to 80-85% can be achieved if it is given repeatedly over 2-4 days or as a single 600mg dose within the first 10-14 days after a missed menstrual period (5,33). RU 486 when used in combination with PG analogues results in a higher rate of complete abortion. Several studies have varied the doses and duration of RU 486 in relation with varied doses of the PG analogue, sulprostone (32) and the resultant complete abortion rate has varied between 90 and 100%. Dubois et al (13) using a single dose of 600mg, in 106 women with lengths of amenorrhoea of 49 days and below, obtained a 100% rate of complete abortion. Epostane, used alone requires repeated administration for several days. In two studies (3,10), where the drug was given in a dose of 4 x 200mg per day for 7 days, complete abortion was achieved in 84% of 106 women with amenorrhoea of up to 56 days.

In sum, vacuum aspiration would seem to be the preferred method of pregnancy termination in most developing countries. It is safe, easy to learn and certainly less traumatic than the traditional D and C method. The medical methods, particularly RU 486 with or without PGs, are highly effective but have the disadvantage that they are currently not available in most developing countries. The politics of RU 486 is complicated and it is the policy of the WHO not to make the drug available for clinical trials in countries with restrictive abortion laws.

References

1. Berek JS, Stubblefield PG (1979) Anatomical and clinical correlations of uterine perforations. *American Journal of Obstetrics and Gynecology* 135: 181 - 184.
2. Brenner WE, Edelman DA (1977): Menstrual regulation: risks and abuses. *International Journal of Obstetrics and Gynaecology* 15: 177 - 183.
3. Brigerson L, Olund A, Odland V, Somell C (1987): Termination of early pregnancy with epostane. *Contraception* 35: 111.
4. Bygdeman M, Christanson NJ, Green K, Zheng S, Lundstrom V (1983): Termination of early future development. *Acta Obstet Gynaecol Scandinavia* Suppl. 113: 125.
5. Bygdeman M, Vanlook PFA (1989): The use of prostaglandins and the antiprogestins for pregnancy termination. *International Journal of Gynaecology and Obstetrics* 29: 5 - 12.
6. Cameron IT, Michie AF, Baird DT (1986): Therapeutic abortion in early pregnancy with antiprogesterone RU 486 alone or in combination with prostaglandin analogue (gemeprost). *Contraception* 34: 459.
7. Cameron IT, Baird DT (1988): Early pregnancy termination: a comparison between vacuum aspiration and medical abortion using prostaglandin (16,16-dimethyl-trans- 2PGE1 methyl ester) or the antiprogesterone RU 486. *British Journal of Obstetrics and Gynaecology*. 95: 271.
8. Cates W, Schulz KF, Grimes DA (1983): The risks associated with teenage abortion. *New England Journal of Medicine* 309: 621.
9. Chen JK, Elder MG (1983) Preoperative cervical dilatation by vaginal pessaries containing prostaglandin E2 analogue. *Obstetrics and Gynaecology* 62: 339.
10. Crooji MJ, Nooyer CCA, Rao BR, Berends GT, Gooren LJG, Jansens J (1988): Termination of early pregnancy by the 3B-hydroxysteroid dehydrogenase inhibitor, epostane. *N Engl J Med* 19: 513.
11. Csapo AI (1973): The prospects of PGs in postconceptional therapy. *Prostaglandins* 3: 245.
12. Deveraux G (1960): *A study of abortion in primitive societies*. London: Thomas Yoseloff.
13. Dubois C, Ulmann A, Aubery E, Elia D, Jourdan MC, Van Den Bosch Inc, Len M, Baulieu EE. Contraception par le RU 486 Interet de l Association a un derive prostaglandin. *C R Acad Sci Paris* 306(3) : 57.
14. Grimes DA, Cates W (1979): Complications from legally induced abortions : A review. *Obstetrics Gynaecol Survey*. 34: 177 - 191.
15. Herman W, Wyss R, Riondel A et al (1982): Effet d'un steriode antiprogesterone chez la Femme: Interruption du cycle menstruel et de la grossesse au debut. *Cr Acad Sci Paris* 294: 933.
16. Hodgson JE (1981): Abortion by vacuum aspiration: In Hodgson JE (ED). *Abortion and Sterilization. Medical and Social Aspects*. P 277. New York. Grune and Stratton.
17. Karman H, Potts M (1972): Very early abortion using syringe as vacuum source. *Lancet* 7759 - 7760.
18. Kerslake D, Casey D (1967): Abortion induced by means of the uterine aspirator. *Obstetrics and Gynaecology* 30: 35 - 45.

19. Lauersen NH, Graves ZR (1984): Pre-abortion cervical dilatation with a low dose prostaglandin suppository: A comparison of two analogues. *Journal of Reproductive Medicine* 29: 133.
20. Liggins GC (1982): PGE₂ for cervical ripening and induction of labor. *Contemporary Obstetrics and Gynaecology* 19: 211.
21. Newton BW (1972): Laminaria tent: Relic of the past or modern medical device. *American Journal of Obstetrics and Gynaecology* 113: 442.
22. Niloff JM, Stubblefield PG (1982): Low dose vaginal 15-methyl prostaglandin F₂ for cervical ripening prior to vacuum curettage abortion. *American Journal of Obstetrics and Gynaecology* 142: 596.
23. Paintin DB (1985): Legal abortion in England and Wales. In Abortion: Medical Progress and Social Implications. (CIBA Foundation Symposium 115) John Willey and Sons LTD. London pp 4 - 12.
24. Rabe T, Kiessel L, Kellermann J, Weidenhammer K, Runebaum B, Potts GO (1983): Inhibition of human placental progesterone synthesis and the aromatase activity by synthetic steriodogenic inhibitors in-vitro. *Fertil Steril* 39: 829.
25. Rashbaum W (1977): Discussion: Medical aspects of abortion. In Hern WM, Andrikopoulos (ED). *Abortion in the seventies* p.48. New York. National Abortion Federation.
26. Rodger WM, Baird DT (1987): Induction of therapeutic abortion in early pregnancy with mifepristone in combination with prostaglandin pessary. *Lancet* 1415.
27. Schulz KF, Grimes DA, Cates WJJ (1983): Measures to prevent cervical injury during suction curettage abortion. *Lancet* 1182.
28. Schulz KF, Grimes DA, Park T, Flock M (1984): Prophylactic antibiotics to prevent febrile complications of curettage abortion. Paper presented at the 8th Annual Meeting of the National Abortion Federation. Los Angeles CA May 15 1984.
29. Sidhu MS, Kent DR (1984): Effects of prostaglandin E₂ analogue suppository on blood loss in suction abortion. *Obstet Gynaecol* 64: 128.
30. Stubblefield PG (1981): Midtrimester abortion by curettage procedures: an overview. In Hodgson JE (Ed): *Abortion and Social Aspects* P 277, New York, Grune and Stratton.
31. Stubblefield PG (1986): Surgical techniques of uterine evacuation in first and second trimester abortion. *Clinics in Obstetrics and Gynaecology* 13:1, 53-62.
32. Swahn ML, Bygdeman M (1987): Interruption of early gestation with prostaglandins and antiprogestin In: Fertility Regulation Today and Tomorrow (ed. E. Diczfalusy, M Bygdeman) Serono Symposia Publications. Vol. 36, p.109 Raven Press, New York.
33. Ulmann A. (1987): Uses of RU 486 for contragestion: An Update *Contraception* 36(Suppl): 27.
34. Webster MA, Phillips SL, Gillmer MDG (1985): Interruption of first trimester human pregnancy following epostane therapy - Effect of prostaglandin E₂ pessaries. *Br J Obstet Gynaecol* 92 : 963.

35. Welch CC, Macpherson M, Johnson IR, Nicolaides K, Filshie EM (1984): Preoperative dilatation of the first trimester cervix: A comparison between Lamicel and 16,16-diamethyl trans2 prostaglandin E1 methyl ester pessaries. *American Journal of Obstetrics and Gynaecology* 149: 400.
36. World Health Organization (1987): Task force on post-ovulation methods for fertility regulation: Menstrual regulation by intramuscular injections of 16-phenoxy-tetranor-PGE2 methyl Sulfonylamide or vacuum aspiration. A randomised multicenter study. *Br J Obstet Gynaecol* 94: 949.
37. Williams JW (1926): *Obstetrics* 5th Ed. pp. 417-438. New York Appleton.
38. Wingerup L, Umsten U, Anderson KE (1979): Ripening of the cervix by intracervical application of PGE2 gel before termination of pregnancy with dilatation and evacuation. *Acta Obstet Gynaecol Scand* (Suppl) 84: 15.

DISCUSSION

Discussions following Mrs Tubi's presentation centered on the efficacy of MVA as a method of treatment of incomplete abortion and for pregnancy termination. Most participants agreed that the method was extremely cost-effective and recommended that the federal Ministry

of Health should provide materials and training in its use in government health institutions. They emphasized the point that the use of the method could exert the most significant impact on reduction of mortality and morbidity from unsafe abortion in Nigeria.

Questions were raised concerning the sustainability of the IPAS project in Nigeria. Mrs Tubi pointed out that IPAS has been concerned with introduction of the method and initial training on its use. Local trainers now exist and arrangements can be made to purchase the equipment through the private sector. Also given its simplicity, plans may be made in the long term, to manufacture the equipment locally in Nigeria.

Several participants were concerned that it is difficult to guarantee proper sterilization of MVA equipment and that this may become an avenue for the transmission of diseases, especially HIV. It was strongly recommended that this danger be recognized and dealt with in future research on the technique. Mrs Tubi responded by saying that the risks of HIV infection are small if proper sterilization techniques are used and reiterated the importance of proper conduct of the procedure during training on its use.

The discussion of Professor Otubu's paper which some participants found to be rather technical but very interesting and informative began with a number of questions seeking further clarification and explanation of technical terms and the new procedures that he outlined. Thereafter, the discussion centered around the problems of introduction and the use of RU 486 in Nigeria. Several participants expressed concern that, with difficulties of controlling the distribution of drugs in Nigeria, RU 486 could be imported by individuals and pharmacies from European countries where it is available. Misuse by uninformed and untrained persons would result in cases of incomplete abortion with the attendant dangers. It was explained that the drug was still tightly controlled in most developed countries and that the WHO does not allow the use of the drug for clinical trials in countries with restrictive abortion laws.

CHAPTER 4 : SOCIAL AND LEGAL ASPECTS OF INDUCED ABORTION IN NIGERIA

WOMEN AUTONOMY AND THE RIGHT TO FERTILITY CHOICE

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Permit me to express my personal gratitude and that of my organization for the rare opportunity to address this most august international gathering. The members and executive of Women in Nigeria (WIN) consider this invitation as important because it is based on a realization that the issue of induced abortion is not just a technical matter that is better left to professionals to handle. Rather it has social roots and consequences which only social groups are in a position to take up.

From what can be gained from the outline of the seminar, it is clear that the organizers want to create a forum for high level enlightenment, and a platform for social policy agitation. Hence the array of academics from different disciplines who will be presenting papers here. This particular development is most commendable because for a long time, the abortion debate has been dominated by medical professionals and religious pundits. Intervention by women groups have often been either ad-hoc or outrightly apologetic. This therefore started the debate and limited its scope.

Already the Minister of health, Professor Olukoye Ransome-Kuti, has hinted that government is contemplating legalizing abortion. I am aware that this disposition of the government has been informed by a report of a panel of medical professionals. Since I have not read the report, I would not want to speculate, but I would not be surprised that no single women group was represented in that panel. Consequently, the recommendation of the panel is most likely to be hinged on the consequence of abortion on the physical health of the woman. Crucial as the threat to the physical health of women who undergo illegal abortions may be, a recommendation based solely on this reasoning is open to serious attack as we shall see later in this paper. However, in addition to pure health grounds, induced abortion has effects on the social life of women. Particularly, in this era of pro-democracy movements, the consideration of fundamental human rights dictates that debates on issues of this nature must assume a more rational and liberal form. This is what recommends an integration of Women groups into the debate at a more serious level. It is only when they actively participate that the debate can be raised to a more useful level.

Range of Arguments on Induced Abortion

Brief sketches of arguments on induced abortion are necessary to demonstrate and to identify the tasks in front of those fighting to legalize abortion.

(a) Sketch One : One Nkechinyere Epie, in a letter to the Editor of "The Guardian" was furious with a medical doctor for advocating the legalization of induced abortion. In his argument, he asks the doctor " make abortion safe for whom? For the infanticidal mother? Abortion is certainly not safe for the child.Any law in its favor represents a tremendous danger to innocent lives still lying in the womb anticipating a blissful birth". He then concludes that "Yes! Induced abortion is murder. If Nigeria wants to make murder neat and safe (for the murderer, of course), what about legalizing it in all cases".

Of course, if Nigeria was a religious state, such an argument would be tenable. However, in a situation where there are not only several religions but there is a secular order where the right not even to believe in any religion is enshrined in the constitution of the country, the argument loses its total merit. The question arises as to which religion do we look up to for guidance on this matter - christianity, islam or the several traditional religions? What happens to those who do not bother to believe? To resolve this matter, can it not be argued that induced abortion should be legalized so that those opposed to it on religious ground would be free not to indulge in it, while those who have no such inhibitions go ahead and avail themselves of the available facilities?

It is like pork, simply because some religions consider it dirty and unbecoming for consumption of its practitioners, is no reason for making the eating of pork a criminal act. Because the "Celestians" are opposed to the wearing of shoes, is no reason to ban the wearing of shoes. The critical issue here is that opposition to induced abortion is not always espoused by activists of one religion or the other, but also by people who may not be active religious believers.

Several people and some feminist activists are ready to fight for every known rights of women, except the right to abortion. Here, they will say, No! it is murder! This brings to fore the question of socialization which passes on views that people will normally challenge if they were to apply some rational reasoning.

From our point of view, the main deficiency of the religious argument to induced abortion, is its total neglect of the rights and life of the woman. The main point of interest in this argument, is the child. This is based on the premise that whatever the case, it is only sin that motivates a woman to want to induce abortion, to destroy the "gift of God". In addition, even concern for the unborn child is limited to mere physical existence. The material, social, cultural and emotional context in which a child is born is given little consideration. Hence it will be of little concern to these religious groups if the child who could have been aborted were to grow up to commit suicide as a result of the circumstances of its birth.

(b) Sketch Two : A second scenario is painted by an article in "The Guardian" of November 2nd, 1991 titled "ABORTION: THE AMERICAN CONNECTION" by Emevwo Biakolo. This journalist is well known for his campaigns for human rights, hence his views on this matter deserves some serious consideration. He sees behind the present campaign for the legalization of abortion, an American conspiracy. America, he says, views population growth in developing countries as a security threat, hence, it has since the 1960s worked to contain population growth

in Asia, Latin America and Africa. Through the United States Agency for International Development (USAID), the United States has provided about three quarters of the world with contraceptives and half of all the funding for population control programs.

According to Biakolo, the American plan for Nigeria has been in place since 1986. The plan hopes that by 1992, its population control programs would have led to a positive attitude change of 80% of the productive population. The campaign involves the media, music, drama, fabric designers, art, soap operas, conferences, study tours for journalists and training programs for special groups. In all of these programs, attempts are made to undermine religious and cultural barriers to induced or artificial abortion, and this the Americans do by hiding the source of funding, in fact, giving the impression that the debate on artificial abortion is purely a Nigerian affair. In reality, however, it is an American debate for Nigeria.

Biakolo's claims might as well be true. In fact, there are quite a lot of it that is true and that appeal to our political sensitivity. However, as far as the issue of women's rights in relation to induced abortion are concerned, his position is extremely weak. It is a case of an attempt to secure the rights of Nigeria as a Nation at the expense of the rights of Nigerian women.

We would have expected that the writer after establishing the American plot, to go further and explore the theme of the abortion debate in relation to the problems the country (particularly its womenfolk) is facing in that area and then to identify possible solutions that would achieve our objective, and at the same time neutralize the American plot.

It needs to be noted that there is a tendency in this country to rationalize the oppression of women and to trivialise their problems by invoking morality, religion or some theory of national interest which is assumed to be superior to the interests of individuals or social groups. We must in response to this kind of approach unravel the underlying motives about the social objectives so that we can critically examine them to see the score-sheet as far as women's rights are concerned.

(c) Sketch Three : The third scenario is one associated with the position of some women groups. In an interview with the *Classique* magazine in January 1990, the national president of the National Council of Women's Society (NCWS), Mrs Emily Imokhuede, explained the position of her Association thus, "whether they legalize it or not, there will always be cases of people going to the wrong places for abortion.we can prevent unwanted pregnancies and we want to educate our children along these lines, rather than get themselves to the state where you now have to think of removing the pregnancy."

On educating women to prevent unwanted pregnancies, we are all with Mrs Imokhuede, but the matter does not end there. If this soft position is meant to appease the religious groups, it fails because the formal religions do not only frown on family planning, but are also against sex education.

The argument for prevention of unwanted pregnancies can only serve a rhetorical purpose. While it is quite possible to prevent pregnancies in some cases, in several others, the woman is often either not in a position to do so as in the case of the under-aged, or gets pregnant in circumstances beyond her control, as in the case of rape or ineffective contraceptives. HIV

infection in a pregnant woman, is another reason that necessitates abortion to prevent the social agony of both the mother and the child, should the pregnancy be retained.

The point is that, the circumstances that produced the pregnancy, may dictate the need for an induced abortion or create a crisis to such an extent that for the physical, social, cultural and emotional health of the mother, the family and the society, it would be better to abort it. It is like the case of medical care, simply because ill-health can be prevented, does not mean that curative medical care should not be developed.

(d) Sketch Four : Support for induced abortion in this country, has come largely from medical professionals. In the ten years that induced abortion received official notice, it has been campaigned for mainly by medical professionals. It was gynecologists who started it by sending a memorandum on the issue to the Federal Government in August, 1974. In October 1980, a medical doctor legislator introduced a bill "Termination of pregnancy Law" to the National Assembly. Due to pressure from mainly religious groups, this bill was withdrawn. Presently, the debate is back on the platform, with medical doctors in support of legalizing abortion and religious groups in opposition.

Most medical professionals base their arguments on their concern for the high rate of maternal mortality from unsafe abortion. They would want to see less or no woman die or suffer ill-health from unprofessionally induced abortion. For instance, in a conference organised by the Society of Gynaecology and Obstetrics of Nigeria (SOGON) in Ibadan in June 1990, the point was made that, "...poorly performed procedures (abortion) contribute significantly to maternal mortality and morbidity in Nigeria." It was therefore suggested that safe abortion should be available to women when other family methods fail.

Some two weeks ago, the President of the Nigerian Medical Association was reported as warning religious bodies to steer clear of the debate on abortion as their action constituted an interference in the professional duties of doctors. Positive as this may sound, in the context of women autonomy, it falls short of what is expected. When induced abortion is legalized purely from a medical point of view, it would be limited to the cases where the life of the mother or that of the fetus is endangered. This will then limit the services to those who have medically justified cases. Those who may want an abortion for social or economic reasons will be denied either by provisions of the legislation or social harassment.

The medical case, though it advances the case for legalized, does little to the social autonomy of women. The decision to abort a pregnancy shifts significantly from the woman to the physician. Often, in response to the religionists, they debate revolves around the humanness of the embryo - whether the aborted child at the time of the procedure could be said to be alive or not and whether it has assumed a human existence or not.

For the woman, this is not really the point. The reason(s) for which she wants to terminate a pregnancy are likely to be social, emotional or even economic. She does not just want to bring that child to the world, either because, it will ruin her, her family or the child's future. Having the child may undermine her career, destroy her family life or bring economic hardship to

her. These are issues only she understands and stand to suffer the consequences. She wants to take that decision.

(e) Sketch Five : The Nigerian law is very strict on induced abortion. It treats it as a crime whatever the circumstances. Section 228 of the criminal Code states that, "any person who with intent to procure miscarriage of a woman, whether she is, or is not with child, unlawfully administers to her or causes her to take any poison, is guilty of a felony and is liable to 14 years imprisonment." Section 229 gives the woman involved seven years, while section 230 gives the doctor three years.

Lawyers not inhibited by religion, who in their daily work come across several legal cases of abortion often come to the conclusion that making abortion illegal does not solve the problem. They argue in line with medical doctors, that since inspite of the law, people still engage in abortion and particularly because of its illegality, women who do, resort to means that in the end do harm to themselves, it would be better to legalize it. They reason, why should so many lives be lost in respect of a law that serves no useful purpose.

The weakness of the legal case is the same as that of the medical argument. It touches the core of the matter but not the real reason. We may all agree that abortion should be legalized but should it be because the law is ineffective? Should it not be because the law is unnecessary or even wrong? Could the forceful retention of an unwanted pregnancy not lead to other grievous crimes like suicide, dumping of newly born babies, violence and even murder? How can a teenage girl whose education is terminated due to an unwanted pregnancy enjoy the equal opportunity granted her in the constitution?

These sketches have not exhausted all that exist. There are several other scenarios, but I wish to limit myself to the five above. In all, except the religious case, a case is made for family planning and sex education through vigorous public enlightenment to youths about the consequences of abortion. The argument is that unwanted pregnancies should be prevented rather than resorting to unsafe abortion.

The case for legalization of abortion has nothing against sex education or family planning. As far as women are concerned, it is not in most cases a means of family planning, but an act of desperation, a means of last resort when other ways have failed or are unavailable. A wife who is involved in family planning may one day find herself pregnant because the family planning device failed. Abortion then becomes inevitable.

In the case of sex education, we are told that when a young "girl is educated properly, counselled in ethics and social responsibility, she would adopt the attitude that would not lead to unbridled sex and unplanned pregnancies." This is nothing but rhetoric. No one needs to be told that if such education was effective, there would be no unwanted pregnancy in the first place. In the second place, the argument assumes that all unwanted pregnancies are the outcome of unbridled sex or sex that is not socially sanctioned.

As I have argued earlier, unwanted pregnancies come about through several means, some like rape, and failure of family planning devices occur in circumstances beyond the control of the

victim. There are also cases where for a woman's career or education, she may decide to abort a pregnancy that she had earlier consented to, due to changed circumstances. This is really the point. Unwanted or unplanned pregnancies impose on women several problems, some of a nature that ruin their lives or distort it. Hence, to maintain a normal social life and benefit from the opportunities society presents to her, she deserves the right to terminate any such pregnancy. It is both necessary for a woman's social well-being and the exercise of her social sovereignty.

Illegal Abortion And its Consequences

As my analysis above show, the fact that induced abortion is illegal in Nigeria, have led to several consequences. These consequences can be treated in three broad sub-headings :

Medical: Due to the fact that abortion is illegal, and earns heavy social stigmas, the victims are often compelled to submit themselves to abortion procedures that are crude and dangerous leading to a high rate of mortality or medical complications. There are stories of mutilated school girls who had gone to unqualified abortionists and end up dying or developing serious health complications. Poorly conducted abortions also cause childlessness as the womb may be damaged in the course of an abortion. This is an important source of mental anguish and social crime.

Legal: Sexual promiscuity as a consequence of social permissiveness has become prevalent in our society. The standards of morality have there become very low. To prevent unwanted pregnancy through abstinence or even family planning is hardly taken seriously by our youths. Society rather than insist on the old standards of morality, must consider making allowance for the new reality. It is failure to do this that make so many people insist that abortion should remain illegal.

The result of the illegal status of abortion is that the practice has been driven underground. Being illegal, the practitioners charge exorbitant fees, perform a bad job and in the end create greater social problems both physically, socially and emotionally.

As it is well known, because abortion is illegal in so many countries, it is the most widespread crime committed by women. Punishment for abortion therefore, rather than stop or reduce the incidence, can go a long way to brutalize women, stigmatism and criminalise them. Particularly in the case of poor women, punishment for abortion may be the cause of the loss of jobs, husbands, social status, education opportunities or political advancement.

Social: The implication of the non-recognition of the rights of women to abortion is that women are considered the properties of their men, whether husbands and parents. The child they carry when pregnant, belongs not to her but to her husband or the father. Abortion is seen as something a woman cannot decide for herself, hence, even where it is done for medical reasons, the husband or father of the victim is expected to be the one to give the mandate.

However, the greatest consequence is the obstacle the retention of unwanted pregnancies places on the path of the woman. It disrupts the education of teenage girls, causes divorce or family violence when the husband is opposed to the termination of the pregnancy or when he is not responsible for it. Infertility as a consequence of poorly performed abortion is today one of the

causes of prostitution, vagrancy, family violence and divorce. Faced with these problems, women are unable to control their lives and find it difficult to plan their careers or take up challenging jobs.

Conclusion

In the past few years, both at the governmental and non-governmental levels, concerted efforts have been exerted to mobilize women towards taking up their rightful place in all facets of society. The only way women can do this is if they are educated, trained and experienced in their chosen fields.

This present efforts will fail if women's rights are treated as common property and subordinated to the conveniences of so-called social morality and considerations of national interest. While society does have the right to regulate the conduct of its citizens so as to preserve itself and maintain a ji life, this must not be done at the expense of the welfare of a section of the citizenry.

Without prejudice to the religions, the social morality that is allegedly being protected is not one that is in line with modern realities. Every society strives to adapt to changes in its environment. This adaptation necessarily involves changing standards and realigning them with reality. A failure in this regard is only a formula for social crisis where social reality will more often than not contradict the law or mores of moral conduct.

So far in Nigeria, the medical and legal professionals have done their best to fight for the legalization of abortion. This struggle have often suffered defeat because their arguments do not go beyond what is accepted in our present patriarchal society. It cannot be otherwise. The only way the struggle for legal abortion can truly be won once and for all, is when women groups take up the challenge and add to the argument for the right of women to decide what to do with their bodies, to decide when to have and not to have children, to act when their function as mothers become an inconvenience and a hinderance to their social progress and social advancement.

I seize this opportunity therefore to call on all women groups to take up the challenge and to use all fora to campaign for the liberalization of the restrictive abortion law in the country. I thank you all for giving me audience.

POLICY AND LAW RELATING TO ABORTION IN NIGERIA : THE QUEST FOR BALANCE.

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The "Abortion Debate" in Nigeria has once again been sparked off, this time by statements made during a press briefing given by the Minister of Health, in August this year, calling, inter alia, for a review of laws relating to abortion or termination of pregnancy in the country. Although the press briefing dealt with a number of issues relating to reproductive health, including problems associated with early marriage and childbirth for women, none of the other equally important issues discussed have received the attention given to abortion law reform.

Amid the ongoing heated and emotional reaction triggered by the Minister's statements, many of the salient issues seem to have been glossed over or ignored. Due to an unguarded use of the term "legalization", the debate has, unfortunately, been largely conducted in polar terms - either you are for or against abortion; either the procedure is legal or it is illegal - there seems to be no recognition of grey areas.

This paper critically examines the existing law relating to abortion in Nigeria, some of the ethical issues raised in the ongoing debate and makes some recommendations for changes in policy and the law.

The legal position on termination of pregnancy in Nigeria today and the policy embodied therein, which is being challenged by certain individuals and groups as unsatisfactory and harmful to women's health, is part of our colonial legal heritage. It did not result from a felt need in the Nigerian society.

The challenge being posed should be seen in a positive light as an opportunity for Nigerians to overtly frame a relevant policy in the interests of good health and social justice in the country. The central question for debate is not "Should abortion be legalized" but "What should policy and law on abortion in Nigeria be" and this question merits careful, objective consideration.

The Law Relating to Pregnancy Termination in Nigeria.

Pregnancy Termination in Nigeria is governed by criminal law - the Criminal Code applicable in the southern states of the country and the Penal Code applicable in northern states.

Sections 228 and 229 of the Criminal Code provide as follows :

Any person who, with intent to procure miscarriage of a woman whether she is or is not with child, unlawfully administers to her or causes her to take any poison or other noxious thing, or uses any force of any kind, or uses any other means whatever, is guilty of a felony, and is liable to imprisonment for fourteen years ...

Any woman who, with intent to procure her own miscarriage, whether she is or is not with child, unlawfully administers to herself any poison or other noxious thing, or uses any force of any kind, or uses any other means whatever, or permits

any such thing or means to be administered or used to her, is guilty of a felony, and is liable to imprisonment for seven years.

The only exception to these rules is made in Section 297 which stipulates that :

A person is not criminally responsible for performing in good faith and with reasonable care and skill a surgical operation upon any person for his benefit, or 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 to all the circumstances of the case.

The Criminal Code thus makes it criminal for any person, (including a qualified medical practitioner) to attempt by any means whatever to terminate a pregnancy, whether or not it has been certified that the woman in question is pregnant, unless such termination is reasonable, and is carried out in good faith and with due care and skill in order to preserve the life of the mother.

The attempt to induce an abortion is *prima facie* unlawful but the exception made in Section 297 is not specific to this offence. It applies to any situation where a person performs a *surgical* operation in good faith and with due care and skill on another person where the performance of the operation is reasonable given the circumstances.

Section 230 of the Criminal Code further provides that :

Any person who unlawfully supplies to or procures for any person any thing whatever, knowing that it is intended to be unlawfully used to procure the miscarriage of a woman, whether she is or is not with child, is guilty of a felony, and is liable to imprisonment for three years.

What are the implications of these provisions for medical practitioners, pharmacists, herbalists and other persons who participate in some way in the termination of a pregnancy? Can they avoid criminal liability?

It would appear that only surgical operations are covered by Section 297. We therefore have a somewhat absurd situation where, in contrast, pregnancy termination procured by medical and other means are unlawful under any circumstances. All qualified medical

practitioners and traditional healers exercising a degree of care and skill that is reasonable for their profession are also covered by Section 297.

Following the decision in the case of *R v Bourne*¹ the phrase - "preservation of the life of the mother" does not necessarily imply that the woman's life is under an immediate threat, but the performance of the operation must be reasonable, having regard to the patient's state and to all the circumstances of the case. This leaves much discretion to the doctors although, ultimately, the courts have to pronounce upon what is reasonable and it is almost impossible in the absence of decided cases to predict how they would interpret this provision.

It is not clear what constitutes unlawful supply and unlawful usage under Section 230 of the Criminal Code. It could be argued that qualified pharmacists who are lawfully supplying and distributing drugs and devices cannot be held criminally liable *unless* they know that such drugs and devices are going to be used in circumstances not covered by the exception in Section 297.

The provisions of the Penal Code are clearer and better drafted than those contained in the Criminal Code but are essentially similar in content. Sections 232 and 235 provide as follows :

Whoever voluntarily causes a woman with child to miscarry shall, if such miscarriage be not caused in good faith for the purpose of saving the life of the woman, be punished with imprisonment for a term which may extend to fourteen years or with fine or with both ...

Whoever before the birth of any child does any act with the intention of thereby preventing that child from being born alive or causing it to die after its birth and does by such act prevent that child from being born alive or causes it to die after its birth, shall, if such act be not caused in good faith for the purpose of saving the life of the mother, be punished with imprisonment for a term which may extend to fourteen years or with fine or with both.

The Penal Code thus makes induced abortion illegal except it is done for the purpose of *saving* the life of the woman. An operation performed with the requisite intent on a woman who is not pregnant is not illegal, neither is an unsuccessful attempt to induce abortion. The focus would appear to be on the result of abortion - actually causing a woman to miscarry rather than on the procedure itself. Under Section 233 of the Penal Code however, it is illegal to cause death with intent to induce an abortion whether the woman is actually pregnant or not.

Both the Criminal and the Penal Code stipulate that a child becomes a person when it has proceeded from the body of its mother alive². So the termination of pregnancy is not considered to be murder, as the foetus is not a person, capable of being killed, by this definition.

As various commentators have noted (Okagbue,1990; Ilumoka,1989) prosecutions under these provisions of the Criminal and Penal Codes are very rare. An analysis of court decisions reveals that prosecutions for procuring abortion are almost always initiated when the pregnant woman dies or is seriously ill as a result of an attempted termination of pregnancy³. Procuring miscarriage of a woman is an extremely difficult charge to prove as the victim is usually an accomplice, technically liable to prosecution herself or is unwilling or unable to testify. It is also difficult to prove beyond reasonable doubt that a procedure was carried out to procure miscarriage rather than to complete an incomplete abortion (spontaneous or induced).

A Reappraisal of the Law.

The law on pregnancy termination in Nigeria has its origins in nineteenth century English law. It is the product of a period when known and commonly used procedures for inducing abortions involved a high risk of mortality and morbidity. Also, the procedure used by qualified medical practitioners was surgical. This is probably why Section 297 appears to be limited to surgical operations. Medical procedures for inducing abortion like the application of anti-progesterone and prostaglandins at a very early stage of pregnancy are considered safer than surgical methods and yet are not covered by the exception to illegality in Section 297.

Today, advances in medical science and improvements in technology have resulted in a situation in which the line between contraception and procuring abortion has become exceedingly thin.

Post-conception methods of birth control such as Intra Uterine Devices and some progestogens can be used to procure miscarriages and their use could therefore be illegal under the provisions of the Criminal Code.

"Menstrual regulation" could be legal even under the broad provisions of the Criminal Code as it may be difficult to prove the requisite intent to procure miscarriage. In fact, it would appear that under the Penal Code, menstrual regulation - defined as a procedure carried out prior to verification of pregnancy - and the use of anti-progesterone such as RU486 is legal, as the necessary criminal *act* - causing a woman with child to miscarry - is not effected.

What then is the purpose of the law on pregnancy termination in Nigeria? What policy is implicit in it?

The provisions of the law appear to be concerned with protecting women from a dangerous procedure. This explains references in Section 228 of the Criminal Code to "unlawful administration..., force..." etc. It also partly explains the exception made in Section 297 to performance of an abortion by a qualified and competent practitioner. The dangers of the abortion procedure that might have given rise to this concern have been and are being significantly reduced in modern times with the development of new and safer methods of inducing abortion. Section 229 of the code, which imposes criminal liability on the woman, seems to be based on the premise that terminating a pregnancy is wrong and women should be punished for attempting it. The Penal Code is also primarily concerned with the abortionist and does not single

the woman out for specific attention⁴. However, this concern seems to be a result, not of the dangers of the procedure, but a belief that causing miscarriage, irrespective of the method used and the practitioner's competence, is a bad thing and should be punished. These legal provisions thus seem to take a natural law position that the termination of pregnancy is an inherent wrong, permissible only when the life of the mother is at risk. This policy does not address *why* women seek to terminate pregnancies.

Towards Balanced Policies and Law

Attempts at changing the law relating to induced abortion in Nigeria and the debates that ensued have been discussed exhaustively elsewhere (Ilumoka, 1989). A brief summary of some of

the main points and ethical issues raised will suffice for this discussion. Two main arguments raised by people opposed to a review of abortion policy are that abortion amounts to killing a living being who should be entitled to the protection of the law and that a liberalized abortion policy would legitimize or even encourage "promiscuity" or irresponsible sexual behavior.

The rights of the unborn child are thus to be protected at the expense of its mother. Such juxtaposition is typical of fragmented modern western thought and a corresponding adversarial legal system which seeks to assign rights to all entities.

It is also noteworthy that the control of sexual irresponsibility which is said to lead to unwanted pregnancy and abortion, is to be effected through women only or mainly⁵. Some anti-abortionists who favor the legal status quo invoke some abstract notion of morality to support punishing sexual intercourse by imposing a penalty of compulsory childbirth on women.

Sexual activity however, has never been successfully arrested by fiat, and, more importantly, *patterns of sexual activity*, which is really what most commentators are concerned about are a result of changes in social organization. Blaming and penalizing women cannot solve the problem.

The central question which is often not addressed is what pressures lead women to terminate pregnancies. Termination of pregnancy, on the scale on which it takes place today is without doubt a result of the pressures of modern living and rapid urbanization. More and more women are going to school and working in modern industry; family and community support systems are breaking down and the burden of domestic work and child care falls heavily on women; in the quest for a better standard of living, some couples are limiting the size of their families; in many parts of the country women are getting married later than was usual, or not at all and sexual patterns of behavior are changing rapidly. Furthermore, economic pressures in the society has led to an increasing commodification of sexual intercourse. Access to contraceptives is still exceedingly limited especially for young people. The high cost of safe abortion services rendered by competent medical practitioners leaves the majority of women no choice but to make do with the services of less qualified practitioners and backstreet abortionists.

There appears to be an undue emphasis on the law and achieving changes by fiat and criminal legislation and yet the gap between law and practice today is testimony to the limits of the law. What is needed are policies directed towards alleviating some of the pressures outlined above and encouraging healthy, co-operative relationships between men and women.

To tackle the problem of mortality and morbidity arising from induced abortion, policies must go beyond viewing abortion as an isolated issue. A comprehensive policy for the improvement of women's health generally which includes the reduction of dangerous abortion should address women's access to information about their reproductive systems; access to improved information about, choice and supply of contraceptives which could reduce reliance on abortion; access to safe abortion services and counselling; and training of medical personnel in the safest abortion techniques, is long overdue. With such a policy or guidelines in place the process of law review becomes much easier, because the task is then to formulate laws which will facilitate the practical execution of the policy and abrogate those which hinder it.

To effect the policy outlined above, some change in the exceedingly restrictive current legal situation will be necessary. Decriminalization of abortion or the removal of the *prima facie*

assumption of the illegality of induced abortion in the current law would be an important first step forward.

Very early terminations using antiprogestogens or vacuum aspiration should be available fairly easily to women in family planning clinics and major health centers and hospitals especially in view of the increasingly thin line between contraception and abortion. Some counselling for abortion and post-abortion contraceptive services should also be made available. All this would be possible if the law was restricted to stipulating conditions under which termination of pregnancy is illegal, and procedures to be followed in obtaining a termination after a certain gestation period. These provisions would be directed at regulating the practice of abortion in the interests of women's health and not at prohibition.

At the very minimum, provisions that make the woman criminally liable for attempting to terminate a pregnancy should be removed from the law. More exceptions to the rule of illegality of abortion are needed which recognize social and medical situations in which pregnancy, childbirth and rearing would be a source of great and continuing stress to a woman or a couple. Most importantly, however, liberalization of the law by extending the exceptions to illegality, would pave the way for increased availability of counselling and information on abortion as well as improved services, although it would not guarantee the provision of such services. For many women, particularly low income women, liberalization of the law may improve their access to better quality abortion care at affordable prices if services are available in government run clinics and health centers.

CONCLUSION

It is difficult to assess the magnitude of the problem of morbidity and mortality arising from induced abortion in Nigeria but various studies conducted in different parts of the country indicate that it is significant (Ojo O.A. 1978; Omu et al 1981; Wakile P.E. 1984). It would be erroneous to assume that untrained persons and backstreet abortionists account for all cases of morbidity and mortality arising from induced abortions. Many cases of complications seen in Teaching Hospitals are the result of an initial attempt at pregnancy termination by qualified medical practitioners. Given improvements in technologies, this paper has argued that what is needed to address the problem of unwanted pregnancies and dangerous abortion, is a comprehensive policy on women's health that will deal with the various aspects of the problem; and laws that will not hinder this process or that will facilitate it. Such a policy would focus on the provision of contraceptives as a means of preventing unwanted pregnancies, for few people if any, are advocating the use of abortion as a primary method of birth control. The policy should also provide for counselling on safe abortion in family planning clinics and the provision of termination of pregnancies of up to eight or twelve weeks gestation, especially in cases of contraceptive failure.

Under a new facilitative legal regime, women should not be penalized for unwanted pregnancies and regulations should be couched in flexible terms to allow for the exercise of some discretion by medical practitioners. The law should also prescribe situations under which abortions are illegal in order to protect women from unscrupulous and untrained practitioners.

The criminal law is not an appropriate or effective means of promoting health and social justice

and abortion should be removed from this realm. Changes in the law are not an end in themselves. The emphasis should be on the formulation of a comprehensive policy to improve women's health and status. The formulation and review of laws then becomes a technical part of the process of policy implementation.

REFERENCES

- HENSHAW SK & MORROW E *Induced Abortion : A World Review* (1990 Supplement) New York: Alan Guttmacher Institute (1990)
- ILUMOKA A.O. Reproductive Rights : A Critical Appraisal of the Law Relating to Abortion in Nigeria. In M. Kisekka (ed) *Women's Health Issues in Nigeria*. (Forthcoming)
- OKAGBUE I Pregnancy Termination and the Law in Nigeria. *Studies in Family Planning*, Vol 21 Number 4, July/August 1990, pp. 196-209
- OJO OA Septic Abortion in Ibadan: A Ten Year Review of Cases. *West African Medical Journal* 2: 5, 1978
- OMU AE et al Adolescent Induced Abortion in Benin City, Nigeria. *Int. Journal of Gynecology and Obstetrics* 19:495, 1981

1. 1938 3 All England Law Reports p.615
2. See Section 307 of the Criminal Code and Section 5(2) of the Penal Code.
3. See Okagbue: 1990 for an analysis of eight reported cases.
4. This may simply be a matter of concise drafting, as the woman can also be the abortionist.
5. See opinions expressed under the caption - "Should Abortion be legalized" Sunday Concord October 13 1991, p.13

A LEGAL FRAMEWORK TO LEGALIZE ABORTION IN NIGERIA

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Throughout history, men and women have tried to promote and prevent conception and childbirth. In the former case, it is only in the last few years that the myriad of medico-legal issues concerning, for example, assisted reproduction through artificial conception services have properly been debated and documented in Nigeria (1).

In the later case, however, the debates relating to family planning and, in particular the need to review the law on abortion in Nigeria are beginning to attract public attention and controversy as opinions in the news and the electronic media make clear.

Three views appear to have emerged from this controversy. At one extreme, are those who insist that abortion should be prohibited. At the other extreme, are those who are for legalization of the procedure. In between are those who support the view that abortion should be permissibly regulated. In all these cases, the right view cannot fully be determined and sufficiently clarified or articulated to influence legislation in the absence of a properly documented legal framework. To clarify these propositions, therefore, this paper seeks to:

1. Explain the meaning of abortion as a matter of law.
2. Trace the history of the law on abortion.
3. Examine the present law in Nigeria.
4. Provide a comparative overview of the law in the UK and USA.
5. Identify the legal issues arising from the debate.

6. Identify inadequacies in the Nigerian law.
 7. Develop a legal framework or strategy to legalize the procedure.
- We now turn to address these issues.

1.1 **Abortion**

Abortion is the termination of pregnancy, either spontaneously or by intervention before the fetus reaches viability. As opposed to spontaneous abortion of an intrauterine pregnancy, induced abortion may be criminal or therapeutic. It is criminal if it is voluntarily done with intent to destroy the fetus. The crime may be committed at any time before the natural birth of the child. Procurement is normally achieved by artificial means (2). The word "abortion" is not used in Sections 228, 229 and 230 of the Criminal Code. A synonym used is the term "miscarriage".

Abortion is considered "therapeutic" where exceptions permit it under the law which renders the procedure legal. In 1938, a prominent English doctor was tried on an abortion charge when he induced an abortion on a 15-year-old girl who had been raped. The doctor was acquitted. The judge said:

There remain three further cases in which the arguments in favor of procuring abortion might be very strong. These are:

- (a) Where the woman is pregnant as the result of rape;
- (b) Where the woman is insane and becomes pregnant while insane;
- (c) Where the woman is under the age of consent (3).

1.2 **History of the Abortion Law**

The practice of artificial abortion is as old as history. It was almost certainly practiced by prehistoric people. The earliest abortifacient recipe is more than 4600 years old and primitive peoples all over the world have been found to practice abortion as well as infanticide in order to prevent an increase in their numbers (5). Both Plato and Aristotle approved abortion for this purpose, the latter suggesting that a mother should be compellable to commit abortion after she had borne allotted number of children (6).

In Greece and Rome, abortion was practiced not only for economic reasons but even from shame at the illegitimacy of the child, or the fear that childbirth would detract from the mother's appearance.

In Africa, abortion was similarly practiced or achieved by various means all of them dangerous. At that time, women's health was not a high priority in the value system of both Western and African cultures. The duty of women was principally to bear men's children, particularly sons, and to serve as the foundation and the founder of the families. Ill-health, influenced by early and excessive childbearing, and women's premature deaths in labor were explained through fate, destiny and divine will. Nigeria, being a product of English law, must definitely rely on English jurisprudence for guidance. In England and the USA for example, interference with pregnancy, however early it may take place, is considered criminal unless for therapeutic reasons. The fetus was considered a human life and to be protected by the criminal law from the moment the ovum is fertilized. Before 1803, the legal prohibition of induced abortion was confined to the period after the fetus had quickened, that is, moved in the womb.

This goes back to an ancient speculation as to the time that life commenced. Aristotle put it at about 40 days after conception for the male fetus and about 90 days for the female (7). Hippocrates put the two periods at 30 and 42 days respectively (8). The Stoics thought that the fetus did not become animate until it breathed at birth, but the later Roman view took 40 and 80 days after conception for the male and female fetuses respectively; later still, the time was settled in the civil law as 40 days after conception of both sexes, and this time too, was accepted by Galen (9).

Before the fetus became animate, it was regarded as merely *pars viscerum matris*, so that the destruction of it could not be homicide, though it might be made a lesser offence. Whether its destruction after the supposed time of animation was homicide in law was an issue that was long in doubt. In theology, the question of the time of animation was bound up with theories of the origin of soul. Thus, classical theologians referred to this period as the period of "ensoulment" when fertilization takes place. Saint Thomas Aquinas defined the soul as the first principle of life in those things that live, and he added that life is shown principally by two actions, knowledge and movement. It was therefore easy to imagine that the animus, life or soul, entered the body of the unborn infant when it turned or moved in the womb. Hence, the rule of the common law, dating from the time of Bracton (a contemporary of Saint Thomas) that life is taken to start not as a fixed time after conception but at the moment of "quickening", which usually takes place after midterm. "Life" said Blackstone, "begins in contemplation of law as soon as the infant is able to stir in the mother's womb." Influenced by this theological and medical doctrine, Bracton said that the killing of the fetus after quickening was murder; Coke, however, denied this, and assented such a killing to be a misdemeanor only (10). The situation then became something like this: Abortion before quickening was no crime before 1803. After 1803, however, it became a crime but not punishable so severely as abortion after quickening although both were felonies.

The change in the law was of great significance because nearly all English women who procure abortion do so in the early months of pregnancy before quickening. As has been seen, the abortion law being theological in origin, and resting on the view that the fetus has an immortal soul equally with that of an adult, became the view which influenced anti-abortionist movements till this date.

1.3 The present Law in Nigeria

For Nigeria (11), the crime now rests on the pattern of the English offence against the Person Act, 1861. The law governing the subject is complex, although there are some uncertainties about its application, partly owing to the fact that there have been so few decided cases on it. Perhaps, because of strong emotions aroused by this subject lately, the law on abortion often appears to be misunderstood by those closely connected with it, and this analysis is provided here with the intention of explaining and clarifying what the present law actually is. First of all, abortion must be distinguished from the similar offence of killing an unborn child. Although the term "abortion" is not used in the Code, Section 228 of the Criminal Code (Southern States) states: Any person who, with intent to procure miscarriage of a woman whether she is or is not with child, unlawfully administers to her or cause her to take poison or other noxious thing, or uses any force of any kind, or uses any other means whatever, is guilty of a felony, and is liable to imprisonment for fourteen years. The term "any person" under this section

is taken to include medically or non-medically qualified person or any person simpliciter. A woman may also want to procure her own miscarriage thereby equally contravening the abortion law. And any person who unlawfully applies to or procures for any person anything whatever, knowing that it is intended to be unlawfully used to procure the miscarriage of a woman whether she is or is not with child, is guilty of a felony, and is liable to imprisonment for three years. It is to be noted that the word "unlawfully" appear on four occasions to define the prohibition; at no point, did the sections say when the abortion might be undertaken "unlawfully". It was held in R. v. Edgal (12) that the word has the same meaning which it bears at common law. Infact, the development of the law had been established by the judgement in the celebrated 1938 English case, R. v. Bourne (13) discussed earlier. According to the judge:

"[The law] permits the termination of pregnancy for the purpose of preserving the life of the mother. As I have said, I think those words ought to be construed in a reasonable sense, and, if the doctor is of the opinion ... that the probable consequence of the pregnancy will be to make a woman a physical or mental wreck, the jury are quite entitled to take the view that the doctor ... is operating for the purpose of preserving the life of the mother".

The road to therapeutic abortion, in its widest sense, was thus opened up and was, later, given a further boost in R. v. Newton and Stungo (15) in which the concept of the life of the "woman" was extended to mean no more than either her life or her health. The crime of child destruction or killing the unborn child is committed by a person who with intent to destroy the life of a child capable of being born alive, by willful act causes a child to die before it has an existence independent of its mother. Such a person is guilty of a felony, and is liable to imprisonment for life (16). This provision must be read subject to section 297 of the Criminal Code to make it lawful if done for the preservation of the mother's life. By and large, no medico-legal issue has caused as much bitter public controversy as the debate on termination of pregnancy. To those who believe that life given by God begins at conception, abortion is a grave sin, equivalent to murder, justifiable, if ever, only when the mother's life is at stake.

To others as we shall see, the right to abortion is part and parcel of a woman's sovereignty over her own body. These views taken together are best explained under other legal systems.

1.4 **The Present Abortion Law in the UK and USA**

The law embodied in the 1861 Act was applied rigorously up to 1967. Because of the narrow view or justification for therapeutic abortions, the legal and medical professions in the UK co-existed in a state of watchful neutrality following the Bourne decision. It was against this very unsatisfactory background that the Abortion Act 1967 was passed. The effect of the 1967 Act is to permit abortion in certain circumstances (17), but where these do not obtain, the previous law continues.

In England and Wales, a person shall not be guilty of an offence under the law of abortion when termination is performed by a registered medical practitioner and two medical practitioners who have formed the opinion in good faith that continuance of the pregnancy would either 1) involve risk to the life of the pregnant woman - (the life-saving ground); 2) or risk of injury to the physical and mental health of the pregnant woman -(the therapeutic ground);

3) or risk of injury to the physical or mental health of any existing children of her family - (the social clause). All of these conditions are subject to the risk being greater than if the pregnancy were terminated.

4) The pregnancy may also be legally terminated if it is considered that there is substantial risk that if the child is born, it will suffer from such physical or mental abnormalities as to be severely handicapped. In these cases, termination of the pregnancy may be carried out in the NHS hospitals or in places approved for the purpose by the Health Minister or the Secretary of State. It is this latter clause which legalizes abortions performed privately for a fee in the UK (18).

in the USA, abortion is a statutory crime. Some statutes apply only where the woman is infact pregnant; others are violated if the woman is merely supposed to be pregnant. The punishment varies, but in all cases the maximum for attempted abortion is lower than in England. Some statutes impose an increased punishment where the offence is completed by the destruction of the fetus or the death of the mother; they frequently treat the crime as manslaughter. Some States such as New York, follow the English rule that a pregnant woman who commits or attempts an abortion upon herself is guilty; others exempt her. In the event, whilst the majority of abortion laws within the British Commonwealth have evolved through the common law, the position there has been dominated by constitutional law. Prior to 1973, the various US states had developed statutory regulation of abortion which varied from the very permissive, as in New York, to the comparatively restrictive, as in California. Some states such as Texas, operated on similar principles to those contained in the English Infant Life (Preservation) Act 1929 but the majority followed much the same line as that developed in the Abortion Act 1967 (19).

The abortion issue has been particularly hotly debated in the USA where religious convictions are deeply held and confront an especially active feminist movement.

It was, therefore, only a matter of time before the constitutionality of the State legislation was challenged and matters came to a head in the Supreme Court decision in Roe v. Wade and Doe v. Bolton (20). In essence, the Court held that it was an invasion of a woman's constitutional right to privacy to limit her access to abortion by statute. It was further ruled that an appeal to the Court was not available to an individual on the grounds that very permissive State laws were invalid because they deprived unborn children of the right to life. The Court did, however, consider the fetus in relation to its gestational age. Thus, in summary, it was held that the question of termination of pregnancy was a matter solely between the woman and her medical adviser during the first trimester; the Court could intervene on behalf of the woman during the second trimester - an example of such intervention would be to insist that the termination was carried out in circumstances which put the woman at minimal risk. The Court then turned to the interests of the fetus and concluded that, once viability was established, the State had a compelling interest in the health of the fetus and could intervene on its behalf, subject to the proviso that the continued pregnancy did not constitute a threat to the life or health of the mother.

Viability was assessed as being achieved somewhere between the 24th and 28th weeks of gestation but the Court was careful to insist that this was a medical judgement to be made in individual cases. The suggestion here is, were Nigeria to form part of the United States, the present abortion law would be declared unconstitutional in that, by concentrating on a medical decision as a prerequisite to consent, it would interfere with a woman's right to choose.

According to the Supreme Court:

... the constitution embodies a promise that a certain private sphere of individual liberty will be kept largely beyond the reach of the government. That promise extends to women as well as men... A woman's right to make that choice [to end her pregnancy] freely is fundamental. Any other result, in our view, would protect inadequately a central part of the sphere of liberty that our law guarantees to all (21).

In any event, it is not without interest that constitutional rights appear to be subject to economic forces. In the main, the Roe decision has been confirmed as recently as 1986 (22) and the salutary lesson drawn from it and those of the UK is their liberalized attitude towards the abortion debate.

1.5 Other Legal Issues Arising From Abortion

If one were to assume that the abortion debate is over and it is now legalized, what are the legal rights of the mother, father, fetus and the medical doctor? In the case of the mother, it is apparent that, no matter which jurisdiction is considered, the rights of the mother to terminate her pregnancy must be closely guarded. This is true of jurisdictions like Nigeria where the Presidential system of government is supposedly practiced. A woman's constitutional "right" to privacy in the United States has already been noted. Since the emancipation of women began with the Military in this country, the ideas which underlie today's women view of reproductive freedom has not been considered nor fully explored. There is such a right as the right to "bodily integrity". This principle provides the notion that women must be able to control their bodies and procreative capacities. The extension of this principle should encompass the right of reproduce and the right not to reproduce, although these "rights" are not absolute in that countervailing governmental interests can supersede them. Aside from the biological connection between women's bodies, sexuality and reproduction, the second idea is a historical and moral argument based on the social position of women and the needs that such a position generates. Insofar as women, under existing division of labor between the sexes is concerned, women are the ones most affected by pregnancy, since they are the ones responsible for the care of the children, it is women who must decide about contraception, abortion and childbearing (23). Because of biological contingencies, discriminatory practices and the natural role of women, they are always sick. Therefore, decisions whether to bear or not to bear children are better left to them.

According to one United States Supreme Court opinion:

The paramount destiny and mission of women are to fulfil the noble and benign offices of wife and mother. This is the law of the Creator.

If this is the role of women why legally deny them the right to abort unwanted pregnancies? Does it not make sense for a woman to terminate a congenitally defective fetus rather than wait to keep and rear a defective child (25)? Right thinking members of the society would allude to the notion that the mother should be permitted by law to terminate her defective fetus if she so wishes. What about the mother's right to refuse abortion? In one English case, damages were awarded in the Court of Appeal for a pregnancy resulting from negligent sterilization despite the fact that the

plaintiff had refused an abortion. "I cannot think it right", it was said, "that Court should ever declare it unreasonable for a woman to decline to have an abortion in a case where ... were [no] medical or psychiatric grounds for terminating the particular pregnancy (26). Where the father in the abortion controversy is concerned, has he any say in whether or not the child be aborted? In 1978 in Paton v. British Pregnancy Advisory Service (27), a husband tried to prevent his wife from having an abortion. She had been concerned about her pregnancy and consulted her doctor, but did not consult her husband. She obtained a certificate from two registered medical practitioners that the continuation of the pregnancy would involve substantial risks to her health. So an abortion could lawfully proceed. Her husband intervened. He went to Court to ask for an injunction (an order) to prevent the abortion from being carried out without his consent. The Court refused an injunction. The judge said that the Abortion Act 1967 gave no right to the husband to be consulted. In the absence of such a right under the Act, the husband had "no legal right enforceable at law or in equity to stop his wife having the abortion or to stop the doctors from carrying out the abortion".

The abortion went ahead. The husband went to the European Commission on Human Rights, arguing that the Act and the Judge's decision infringed the European's Convention on Human Rights. He argued that his right to family life and the unborn child's right to life had been infringed. The Commission dismissed his claim. They said that where an abortion was carried out on medical grounds, the husband's right to family life must necessarily be subordinated to the need to protect the rights and health of the mother. The unborn child's right to life was similarly subordinate to the rights of its mother, at least in the initial months of pregnancy. The Commission's decisions suggest that a rather different view might be taken of abortions performed later in pregnancy and of abortions performed other than to protect the mother's health (28). Similar decisions have been reached in the USA (29). The matter came to a head rather dramatically in England in 1987 in C v. S. (30), when all appeal stages were completed in approximately 72 hours. It was held that the father had no locus standi to bring proceedings either based on his personal interests or while acting as the next friend of the fetus; this part of the original judgement was not appealed. The issue in C v. S. was, however, closely tied to the question of the legality of terminating a pregnancy of 18 weeks' gestation which might or might not involve a fetus capable of being born alive.

Whilst the rights of the father is clear, has, then the fetus any say in deciding on his or her survival or destruction? The question raises the issue when does life begin so as to be protected by law. Certainly, there is a right not to be killed after achieving a capacity to be born alive - as expressed under Section 328 of the Criminal Code - or after reaching viability as per Roe v. Wade in the USA. But this is a very limited protection and one which is consonant with the long established and frequently reaffirmed doctrine that the fetus has no rights, save those related to property, until it is born alive. To quote from the President of the Family Division in the 1978 Paton case:

The fetus cannot, in English law, in my view, have a right of its own at least until it is born and has a separate existence from its mother. That permeates the whole of the civil law of this country ... and is, indeed, the basis of the decisions in those countries where law is founded on the common law, that is to say, in America, Canada, Australia, and I have no doubt, in others.

The extent of fetal rights in the context of abortion therefore depends not so much on legal criteria as on a moral base, and this, in turn, is founded to a large extent, on the degree of "personhood" which is attributable to the unborn child. There are two possible approaches to the solution of this problem. One theory which sees fetal and neonatal period of life as being a steady progression towards complete "personhood". The other approach is to regard humanity, and its associated human rights, as being acquired at a given moment in development. This latter view is that which is adopted by the conservative Roman Catholic Church - the view that life begins at the conception of the zygote. It is this same view that is being adopted by the Christian Association of Nigeria (CAN) when it asked the Federal Government not to legalize abortion. A similar view was recently expressed by two respectable Reverend gentlemen of the Church of God Mission in Benin City, Edo State that "life is derived from the Creator and the Creator is God and the period of ensoulment must not be tempered with if one were to avoid committing murder" (32).

Whichever approach one adopts, countervailing government interests in regulating human conduct must be balanced against religious sentiments. At the end of the arguments, however, we must resolve the problem in order to preserve the essence of both. Given the need for a choice, unwanted fetus may be terminated before reaching the point of viability. In the case of the person carrying out the termination of pregnancy, the law is well settled that it should under normal circumstances be undertaken by licensed orthodox medical practitioners - who, invariably are subject to malpractice and other disciplinary actions should there be medical mishaps such as negligence, breach of a promise guaranteeing specific result. As has been seen in Nigeria, most terminations are being carried out by non-orthodox practitioners, quacks and incompetent persons.

1.6 Inadequacies Raised in the Present Abortion Law

There is, presently a worldwide trend towards liberalization of abortion laws which encompass the following:

1. The high incidence of unwanted pregnancies and illegal abortions, with resultant high maternal mortality.
2. Improved medical techniques which have made termination in the early months safer than pregnancy itself.
3. The recognition of a woman's right to determine her child-bearing capacities: the right to reproduce and the right not to reproduce.
4. A consideration of the world population explosion.

QBecause modern technologies appear to have blurred the distinction between contraception and abortion, it had made the old abortion laws obsolete. To understand this proposition, Professor B.M. Dickens (33) earlier identified three types of Commonwealth laws on abortion:

- a) Basic Law, which absolutely prohibited abortion in all circumstances - this might conform to the preference of some jurisdictions, although such a law cost lives which must be saved;
- b) Developed Law, which was based on the English 1938 Bourne decision permitting abortion to preserve the life or physical or mental health - although such law was implicit in basic

law, it often required to be made explicit by declaration of the courts or of a senior law officer, or possibly a health minister;

c) Advanced Law, which set out in detail the conditions under which abortion was lawful.

In all of these laws, it is clear that Nigeria began with the basic law and developed following the Bourne decision and R.v. Edgal. There appear to be inequality and/or inadequacy in the present law as the laws of Northern Nigeria through the Penal Code and those of the Southern States as the indications for carrying out abortion are not quite the same. Thus, whilst the legal indications for granting an abortion in the Northern States is only where there is risk to the woman only, the Southern States also consider where there is risk to the physical or mental health of the woman if the pregnancy were allowed to continue (34).

In either case, however, consideration is yet to be given to other indications in which abortion can be legally procured under the following conditions:

1. Where there is some degree of likely physical or mental impairment of the child;
2. Where there is pregnancy resulting from rape or incest, or some other unacceptable sexual union;
3. For socio-economic reasons, where the pregnancy would affect the welfare of existing members of the family;
4. Where there is failure of routine contraceptive use;
5. Even where a woman may decide to have an abortion on request.

In Nigeria, legal justifications for abortion are restrictive in scope and allowed only where there is risk to the life of the woman and/or to her physical or mental health. Thus, a woman seeking abortion for any other reason is consequently obliged to consult a backstreet abortionist. It is to be noted that the expertise of these abortionists are questionable as they often employ unsafe procedures which put our women in grave danger of serious complications and even death (35).

1.7 The Legal Framework and Conclusion

Classical theologians and practicing Christians have consistently rejected the move to legalize termination of unwanted pregnancies despite governmental propositions to the contrary. Because reliance on religious and moral ethos are insufficient to resolve the issue, it has been suggested by some that attention should also be focussed on the cultural and legal aspects of contraception, with the aim of making contraceptives available to all who need them. Moreover, that if existing laws could be modified to allow easier access to legal abortion, the use of contraceptives might even be made mandatory after every pregnancy termination. We must agree that the laws' attention had lagged behind as induced abortion are still being performed by persons not trained to carry out the procedure - secretly in places with very poor facilities, which often result in serious complications.

In a 13 year review of maternal deaths at the University of Benin Teaching Hospital, abortion was one of the three major causes of death, accounting for 37 (22.3%) of the 165 deaths - with induced abortion responsible for 34 (91.9%) of these deaths. In the whole country, the hospital maternal mortality ratio was reported in 1985 to be 1,050 deaths per 100,000 births (36). The question which need to be resolved now is should we close our eyes to obstetric deaths which result from unskilled abortion and related factors on the grounds of flimsy religious reasons? Obviously, in a country where unsafe abortion is widely available, a program to reduce

maternal mortality will have to be analyzed and will have to consider this question in favor of liberalizing the existing abortion laws.

Aside from the problems arising from the obstetric factors, there could be at least five grounds which one might have a moral duty to reproduce thereby opting to terminate a pregnancy:

1. Transmission of disease to the offspring.
2. Unwillingness to provide proper prenatal care.
3. Inability to rear children.
4. Psychologic harm to the offspring.
5. Non-marriage.

Whilst the last two of these moral standpoint remain controversial, Professor K. Ndeti (37), a sociologist at the University of Nairobi explained from his observations of six East African tribes that:

"No woman is allowed to have children until proper arrangements have been made with regard to the conditions of marriage, initiation rites, responsibilities, duties and parental obligation".

Women not respecting these rules face severe social sanctions, but abortion was used in these tribes to relieve unnatural circumstances, such as when pregnancy resulted from taboo relationship or could result in a social and psychological crisis for an individual, family or community. On balance, therefore, the legal framework to legalize abortion in Nigeria could be prohibitive, restrictive or liberal. Since prohibitive and restrictive laws could force women underground to procure induced abortion, liberalized abortion law if adopted, could discourage women from seeking illegal abortionists. Another strategy for reform of our present abortion law, is to harmonize the Northern and Southern Criminal Codes - bringing them in line with advanced abortion law. Because of inability to dispense with theological beliefs, efforts should equally be made to find common grounds for discussion of fundamental principles with religious groups which were opposed to abortion, with the aim of developing a dialogue and mutual respect. Church groups, it is suggested might respond to arguments based on the United Nations Declaration of Human Rights, and to the recent statement of Poland by Pope John Paul on freedom of conscience.

The decriminalisation of abortion law might be sought through the repeal of specific provisions concerning early termination of pregnancy, and the control of illegal abortion might be effected through statutes governing the unqualified practice of medicine. In addition, doctors should seek to be consulted by lawyers when medical statutes were to be re-drafted. Since Women's access to reproductive health care is limited because of poverty and illiteracy, spousal veto and lack of availability of services in certain areas including rural areas, consideration should be given to authorizing suitably trained paramedical or other health care personnel to provide early abortion services under appropriate supervision.

The legal framework to legalize abortion may have then been reduced to two: Prohibition and/or permissible regulation. In the former, it is submitted that governmental interest should not be influenced or biased as a result of religious sentiments since Nigeria is not a religious sate. There is what constitutional lawyers refer to as "separation of church and State". In the latter

case, permissible regulation, a view widely acceptable by some African Commonwealth Countries represents the view of modern times as in the case of Ghana, Seychelles, Zimbabwe and Zambia. In any event, a gradual legal program (38) aimed at liberalization of abortion laws in Nigeria is suggested.

But the tension created by religion and theological views must be eased or perhaps set aside if legalization is to have the desired significance.

Happily at last, we may now safely conclude that the legal considerations devoid of religious and not-well-thought-out sentiments may have moved from prohibition through restriction to the ambit of liberalization but the initial policy of reducing maternal mortality and morbidity as a result of induced illegal abortions must constantly be kept in mind.

NOTES

1. See T.B.E. Ogiamien, *The legal Aspects and Implications of Artificial Conception Services in Nigeria*, University of Essex Ph.D thesis, 1990.
2. See Report of the Departmental Committees on Maternal Mortality, Cmd. 5422 of 1937, p. 194; F.J. Taussig: *Abortion* (St. Louis 1936) p.21. Modern usage of the term is not fixed. For opposing definition see S. Smith: *Forensic Medicine* (London 1932) p. 324; See also L.A. Parry: *Criminal Abortion* (London 1932) P.I. I J Keown, *Miscarriage, a medico-legal Analysis* CLR 604, (1984).
3. *R. v. Bourne* [1939] I K.B. 637, [1983] 3 ALL E.R. 615.
4. Taussig op. cit. p.31
5. Id at p.41
6. *Politics*, vii cf. *Plato: Republic*, v.
7. *Hist. Anim.*, vii. 3
8. *Lib. de Nat. Pver.*, No.10
9. *Plutarchs Morals*, iii, 230, *Opera, de Usa Partium*, xv.5.
10. See *Commentaries* 1, 129; *The Law of Abortion and Necessity* 2 MLR p. 133 - 134 (1938).
11. See *Criminal Code, Laws of the Federation of Nigeria, 1958*, vol ii (Cap. 42), secs. 228-230, 297; In the Northern States, see *Laws of Northern Nigeria, (1963) Penal Code (Cap. 89) secs. 232 - 234.*

12. 4 W.A.C.A 133 (1938); R. v. Bourne applied.
13. [1939] I K. B. 637, [1983] 3 All E.R. 615
14. Id. [1983] All E R 615
15. [1958] Crim. L.R 467 and 600
16. Sec. 328 of the Criminal Code.
17. From the risk of life to socio-economic factors.
18. Ibid.
19. See Shepiro, S.R., Viability Under Federal Constitution of Abortion Laws 35 L. Ed. 2d 735 (1973).
20. Roe v. Wade 93 S. Ct 705 (1973); Doe v. Bolton, 93 S. Ct 739 (1973).
21. Ibid
22. Harris v. McRae, 100 S, ct 2671 (1980)
23. See note 1 supra
24. Bradwell v Illinios (1873) 16 Wall
25. Consider equally, termination of pregnancy in the mentally handicapped.
26. Reported in J. Glover, "Causing Death and Saving LIves", Penguin 1977 (Reprinted 1986).
27. [1978] 2 All E. R. 986; (1980) EHRR 408
28. Id (1980) EHRR 408.
29. Planned Parenthood of Central Missouri v. Danforth 428 US 52 (1976); Doe v Doe 314 NE 2d 128 (Mass. 1974).
30. The Times London 24 February 1987. QBD; 25 February, CA. For a full discussion see C. Dyer "Father, fails in attempts to stop girlfriends abortion 294 BMJ 631 (1987).

31 See note 27 supra

32. From a person interview september 2, 1991, Faculty of Law, University of Benin.

33. For a comprehensive report see Commonwealth secretariat's Report: Emerging Issues in Commonwealth Laws, 1982.

34. Query the dichotomy in both statutory provisions.

35. Such as those arising from the direct obstetric factors due to their illegality and incompetence.

36 See generally J.A. Unuigbe, et al Abortion-related morbidity and mortality in Benin City Int J Gynaecol Obstet 1988, 26: 435 - 439; Omu et al, Adolescent Induced Abortion in Benin City, Nigeria. Int J Gynaecol Obstet 1981, 19: 495-499. More specifically see World Health Organization (WHO), Maternal Mortality Rates: Tabulation of Available Information. 2, 1986; A Rosen and D. Maine, Maternal Mortality: A neglected tragedy 446 (2) The Lancet, 1985 p.83.

37. See note 33, Id at p.11

38. See Ogiamien, A legal Framework to eradicate female circumcision 28 (2) *Med Sci and The Law* (The Official Journal of the British Academy of Forensic Sciences) pp 115 - 119 (1988).

DISCUSSION

The discussion following Mrs Kilanko's paper was very prolonged and interesting. Mrs Kilanko is a well known woman activist and a member of various women's organizations including the Women's wing of the Nigerian Labor Congress and Women in Nigeria. During the discussion, it was pointed out that doctors and lawyers and others who proffer arguments based on health and the law, do recognize the importance of women's rights and the social dimensions of the problem; their emphasis is a matter of strategy given the controversial nature of the issue. In 1981, women's groups were instrumental in frustrating efforts to liberalize the laws, so perhaps a focus on medical aspects of the problem may persuade more people. It was also

pointed out that the Minister of Health whose statements purportedly triggered the ongoing debate, never said the government was considering legalizing abortion. He was merely reporting on population activities of his ministry and issues relating to women's health and had suggested that perhaps a number of laws affecting women's health needed to be reviewed.

Some participants pointed out that there is no uniformity among doctors on the issue of abortion even though it appeared to be the medical profession championing the struggle for policy reform most strongly. They were of the view that women in Nigeria do not appear to feel strongly enough about abortion to speak out; and that although women should be more involved in the debate, if they are not at the forefront, given their social position and widespread ambivalence on the issue, the cause for reform might be lost.

One participant pointed out that social problems or issues are health problems if a broad definition of health is adopted, although they might fall into the category of mental health problems. Given the widespread practice of abortion and the people involved in procuring abortions, the hypocrisy of most people who oppose provision of safe services was noted. It was also noted that not all women are in a position to exercise the right to fertility choice. Age and social class are significant determinants of that choice.

There appeared to be a consensus that women alone cannot bring about a change in abortion policy but that they must be involved in bringing about that change. The point was very strongly made by one participant that women's ambivalence on the issue was not surprising given the social constraints under which they operate. All through Nigerian history, men have mobilized women for various purposes for example, elections and censuses; so, why not safe abortion?

Following Ms ILumoka's presentation, the issue of the form and content of new laws relating to abortion was discussed at length. Possible exceptions to the rule of illegality were also discussed. There appeared to be a consensus that early abortions should be permitted where the child would be severely disabled and in cases of rape or other violence. Concern was expressed by some participants that some provision should be made for parental consent for abortions for teenagers; others thought that this would once again drive them to the backstreets and that discretion should be left to doctors and social workers/counsellors in schools or hospitals.

It was pointed out that the argument on when life begins and when the fetus merits protection is a never ending one and affects the legality of Menstrual Regulation as developments in science continue to reveal more information about post-conception activity in the womb. All participants agreed on the need for a problem solving approach to resolve the serious problem of mortality and morbidity resulting from dangerous abortion.

A lively discussion followed the presentation of Dr. Ogiamien's paper. The question of whether or not men should have a say in the decision to procure an abortion in Nigeria was raised. Views were mixed with most participants favoring the woman's right to decide, in view of her peculiar responsibilities for the child. A note of caution was however, sounded by one participant who expressed the view that the decision should be a product of discussions between the two partners. Concern was expressed at the implications of Dr. Ogiamien's recommendation that the inability to rear children should be a ground for legal abortion. The question was raised as to who decides whether or not a woman is fit or able to rear children? It was also pointed out

that facilities for the detection of deformities and diseases are limited in Africa, and that in any case, a deformity or disability is not synonymous with a total inability to function and should not be a ground for permitting abortion.

The ambivalence of many victims of dangerous abortions and of women generally, who oppose legalization of abortion was commented on by some participants who wondered what was to be done when those who appear to benefit from a change in the law oppose it.

A short presentation was given by Professor Adeokun after this session on **The Social Consequences of unsafe abortion in Nigeria**. The presentation was given on behalf of Dr I Ayu who was unable to attend the seminar. Professor Adeokun is a professor of Demography and Social Statistics at the Obafemi Awolowo University in Nigeria.

Professor Adeokun noted that unwanted pregnancy results from unprotected sexual intercourse or contraceptive failure, and that in response a woman has three basic options. She can have an abortion; have the baby and care for it or have the baby and fail to care for it - resulting in problems of child neglect, abuse and occasionally, death. Furthermore, the abortion option may be conducted safely, result in minor impairment or in serious injury or death. The importance of understanding the context in which abortion takes place was emphasized.

Who are the persons involved in this scenario? Professor Adeokun suggested that it was useful to classify the woman involved in terms of their status as children and wives. He noted that there are opportunity costs of abortion to individuals as well as to the nation and that these costs are not just economic but also psychic and religious. For example, parents suffer psychologically and materially when their daughter has an unwanted pregnancy as they have to contend with social attitudes as well as supporting her if she has to leave school or work. The woman and her partner, who agonize before, during and after an abortion or childbirth, it was suggested, suffer the greatest agony. Opportunity costs of unwanted pregnancy to individuals include termination or interruption of formal education and/or a career. Costs to the nation include the loss of trained manpower which could be provided by these women and increased pressure on scarce hospital resources for the treatment of complications which are preventable.

Professor Adeokun went on to examine the program implications of this analysis of social consequences for the prevention of unwanted pregnancies in terms of options open to the society. He noted that a much promoted option is the changing of moral values in the society but pointed out the limitations of this option as the sexual urge and patterns of sexual behavior are difficult to change. Another option is sex education and information which can be carried out by parents, their friends (if parents find it difficult to do), and educational institutions. A third option suggested was to publicize actual cases and experiences and their costs, such as the case presented by Professor Briggs in his paper, in order to drive home the message of the urgency of addressing the problem of unwanted pregnancy. Professor Adeokun then called for comments from the participants particularly on the program implications of his analysis of the social consequences of unwanted pregnancies.

During the discussion, a participant from a media house strongly suggested that information and case studies or experiences from the medical profession, other groups and women should be publicized through the various media. Another participant suggested that consideration should be given to adoption as a remedial alternative to solving the problem of

unwanted pregnancies in the country. However, several participants expressed the view that the problem of unwanted children was a far more intractable one than the provision of adoption services and that it cannot be solved or even significantly reduced by adoption.

Several participants thought that sex education at home is a difficult measure to implement, and admitted their own personal discomfort with discussing sexuality with their children. In view of this difficulty, it was suggested that peer promoters could play an important role in providing information on contraception and abortion services. Some participants, however, appeared to be more comfortable with educational institutions taking on this role.

One participant suggested that pregnancy should not be viewed as a problem and that women should be encouraged to accept pregnancies and to go on to complete their education. There was a general consensus however, that resources be directed towards the prevention of unwanted pregnancies and unwanted children.

Another participant thought that it was inaccurate to suggest that it is not possible to change sexual behavior. According to him, sexual behavior in Nigeria over the past three decades has undergone rapid and significant change and factors which have contributed to this, such as exposure to pornographic material, should be examined and addressed.

It was pointed out that the discussion seemed to assume that unwanted pregnancies result only or mainly from socially unacceptable relationships and promiscuity. In fact, many unwanted pregnancies result from contraceptive failure and in circumstances that are socially legitimate but nonetheless difficult or unacceptable to a woman or couple. So the issue and program implications should not be seen just in terms of interventions such as moral education and counselling.

CHAPTER 5: RESEARCH AGENDA

SYSTEMATIZING DETERMINANTS OF ABORTION OUTCOME: A FRAMEWORK FOR ABORTION RESEARCH IN NIGERIA

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Abortion can be defined as an intended termination of a pregnancy by chemical, surgical

or violent means of interrupting the natural development of the fetus. By this definition, abortion can be self induced or obtained from a third party. Spontaneous abortion is neither included in this definition nor in the discussion that follows.

There are three likely outcomes of a process leading to an abortion. These outcomes constitute the dependent variable in our proposed framework (Fig.1)

Fig 1 : DETERMINANTS OF OUTCOME OF ABORTION

BACKGROUND VARIABLES	INTERVENING/PROXIMATE VARIABLES		OUTCOMES OF ABORTION
<u>Demographic</u>	<u>Technology</u>		Death
- Age	- Chemical	M	
- Parity	= variety	A	
- Marital Status	= efficacy	N	Serious
- Gestational age	- Surgical		A injuries
	= Instrumentation		
<u>Socio-economic</u>	- Violence	G	
- Socio-economic status	<u>Competence</u>	E	Minor
- Income access	- Skills available	M	injuries
- Health status	- Support services	E	
	- Preparedness	N	
<u>Attitudinal</u>	<u>Institutional Setting</u>		Safe
- Norms	- Convenience	T	abortion
- Religion	- Formal procedures		
	- Linkages/referral		
	- Secrecy		
<u>Legal Status</u>			
- of Abortion			
- of abortifacient			

The abortion may be completed successfully and without any serious physical or reproductive damage to the pregnant woman. A second possible outcome is for the abortion to be completed with some serious physical and reproductive damage to the pregnant woman, including the loss of fertility. Yet a third possibility is for the injuries to be minor and temporary. And, of course, a third possibility is for the complications of the process to lead to the death of the pregnant woman, during or soon after the abortion.

The purpose of this paper is to look at the background and the intervening (or proximate) determinants of the likely outcome of abortion in Nigeria with the aim of sketching a comprehensive abortion research agenda that address the most salient elements of the interactions between the three category of variables. The variables making up the background variables are briefly described in section 1. The crucial role of the intervening variables in mediating between the background variables and the outcome of the abortion are highlighted in section 2. The possibility of manipulating various legal, health service and attitudinal variables to

improve the outcome of legal abortion are discussed in section 3. Section 4 indicates the possible social and health management research issues and priorities arising from the paper.

Section 1 : Background Variables and the outcome of abortion

There are a number of socio-economic and demographic variables that have been established as strongly associated with the outcome of abortion. These tend to be familiar to an audience such as the present one to need no more than mere invocation. The brief comments offered here on each of these variables are intended to provide an indication of the direction of association in the best of circumstances and in the worst of circumstances.

Demographic Variables

Age of the Woman - Age by itself is a critical factor of safe motherhood and of the outcome of abortion very early in the reproductive span. But the combination of a tender age and a low parity is a much more robust predictor of the likely outcome of abortion.

Parity - In much the same way as the delivery process is very much more difficult in the teenage primigravida, the process of induced abortion carries an additional risk for such women. Unfortunately, the inconvenient pregnancy is common in persons of tender age, especially before entry into marriage. This is the basis of the epidemic of teenage pregnancy and abortion which forms the conjectured core of the demand for abortion in Nigeria. However, abortion is not the preserve of teenagers alone. An inconvenient pregnancy is however, less likely within marriage in high fertility societies. Consequently, the occurrence of abortion in multigravidae is not likely to be on the same scale as for the teenage population. The risk of an undesired outcome of abortion in the multigravida is, albeit, as grave.

Socio-economic Variables

Social and Economic Status - Socio-economic status determines the outcome of an abortion only to the extent to which socio-economic status may determine the knowledge and choice of method of intervention, the location of intervention and the ability of the patient to provide adequate backup support for post-abortion health care.

Health Status - Depending on the timing of abortion and the prenatal care received prior to abortion, the poor health status of a pregnant woman may be indicative of the likely outcome of the process of abortion. Unfortunately, low social and economic circumstances often produce poor state of health in women during pregnancy by mechanisms which are not the immediate purpose of this paper.

Social and religious attitudes to abortion - The impact of these attitudes on the outcome of abortion can take a number of forms. These attitudes affect the degree of readiness of an individual to seek abortion. They influence the openness or clandestine provision of services in a community, and, the promptness or otherwise of the referral of complications.

Legal Status of Abortion - The legal status of abortion and of the abortifacient contributes to the institutional and methodological choices open to the pregnant woman. It also affects the quality of performance of the abortion provider. It may also influence the lack of courage in providers to seek help when the process of abortion is complicated.

Since the relationship between the background variables and the outcome of abortion is

not direct, it is important to specify the paths through which the impact of background variables are mediated. Figure 1 shows a conceptual framework in which the group of variables which act as a filter between the background and dependent variables are displayed. These proximate or intervening variables are now described in turn with a view to identifying their moderate effects.

SECTION 2: PROXIMATE VARIABLES AND THE OUTCOME OF ABORTION

Technologies - By technology we refer to the mode of operation of the abortifacient on the product of pregnancy. In effect the mode may be chemical, as in the use of the "French Pill", RU 486 (Brady 1989), or it may be physical as in the case of Curettage, the famous "D&C". In as much as each technology carries with it a measure of risk of trauma and attendant complications of infection or other side-effects, to that extent is each technology a factor in assessing the likely outcome of abortion. A simple proposition may take the form that the more physical the process, the more likely the risk of complications in the outcome, that is, at any given level of background risk. A more complex form of the proposition can take the form that the less physical the technology, and the more favorable the background variable, then the more likely the successful outcome of the abortion.

Institutional Setting - By institutional setting, we refer to the location of the facilities in which the process is being carried out. This can vary on various measures of setting. In terms of protocol, setting can vary from the very formal to the informal. The more complex the protocol, the more elaborate will tend to be the procedures of admission into the service and the more costly will tend to be the services. In contrast, the informal setting will be characterized by simple procedures of admission, a crudeness of facilities and a concomitant cheapness of services rendered. A facet of institutional setting that also bears directly on the outcome of abortion is the linkages which are available to various levels of care. The more formal settings tend to have access to a more efficient referral system in cases of complications than the less formal. These propositions tend to hold irrespective of the private or public ownership of the facilities.

The impact of institutional setting takes two forms. On the one hand, setting constitute a barrier to some socio-economic classes, whereby, the higher the class the more attractive the formal setting. However, a rider to this proposition is that the more clandestine the proposed abortion, the inverse will be the relationship between class and level of institutional formality. The effect of this selectivity of service by socio-economic status is to push the more dangerous cases to the least effective settings, thereby increasing the risk of an unsatisfactory outcome.

Technical Competence - It is attractive to seek a relationship between technical competence of staff providing abortion and the institutional setting. Attractive because it points out the artificiality of isolating variables and points out the cumulative effect of the various determinants. However, it is worthwhile to isolate the impact of technical competence of staff on the likely outcome of abortion at any given level of background risk. In this context, the simple proposition is that the simpler the technology, the more likely will be the availability of the technical competence to handle the procedure. Conversely, the more physical the procedure, the greater will be the technical competence needed to complete a safe abortion.

Where abortions are carried out in marginal situations of demographic and health status, the need for great technical competence is much higher than where they are carried out under

favorable demographic and other maternal background conditions.

Management of Complications - Ultimately, even the simplest of technologies and the most favorable of maternal conditions can still produce unexpected results. When this happens, the proximate determinant of the outcome will be the management of the complications. In this context, the facets of management crucial to outcome are the timeliness, the competence of intervention and the conformity of patients to management directives. Any weak link in the chain of management can produce unsatisfactory outcome of abortion.

By timeliness, we imply a monitoring function for providers which will allow unexpected complications of apparently successfully completed abortions to be picked up. Unfortunately, the more marginal cases of abortion are to women who for reasons of confidentiality keep their contacts with providers to the minimum. Consequently, the follow-up activities are unilaterally curtailed or discouraged by the patients. Readiness to make a call-back to the facility at which abortion was provided will then depend on the courage of the patients rather than on the readiness of providers to make follow-up services available to their clients.

Competence of intervention in the management link is very difficult to determine since the competence itself is dependent on the timing of intervention. If a case is promptly referred for treatment of the complications of abortion (complete or incomplete), then the skills needed for intervening is much less than when the referral is delayed, often to the point of death. The competence issue is still further complicated by the smoothness of transfer of cases between the provider of abortion and the receiving institution. Where such transfer is within similar health institutions and between modern health care providers, the transfer of knowledge of the patient can be as complete as possible. In contrast, where the transfer is between dissimilar institutions, then the interface between the two systems can add to the complexity of the competent management of the case. The interface problems include the completeness of records, the adequate briefing about procedures and the use of a common technical language. These problems are at their greatest where the patient is being transferred from an illegal or a trado-religious institution or facility to a modern health system.

The competence of the intervention can be compromised also by the reluctance of self-referred patients to come clean with the staff of referral institutions. This is what happens where complications of abortion are disguised as other illnesses or as spontaneous abortion by patients.

SECTION 3: PROGRAMS FOR MANIPULATING THE OUTCOME OF ABORTION

It is possible to bring out these linkages between the variables alive with case studies. What these case studies show is the cumulative effect of the various determinants to which we referred earlier on the outcome of abortion. Another lesson of the case studies is that there are various policy and program options available for improving the conditions under which safe abortion can be guaranteed. For the purposes of this paper, the issue is not the desirability of legalizing abortion, but the identification of programs which will collectively reduce the undesirable, but avoidable outcome of abortions which are being performed, that ia, in spite of their restrictions on their provision.

To begin with, the background variables lend themselves to policies and programs of safe motherhood. One approach is to discourage the institution of early marriage and early sexuality through a combination of legal and moral restraints on those who indulge in such practices. Laws against sexual intercourse with a "minor" have not completely ruled out the offence in societies in which such laws exist but they set viable constraints on the incidence of the offence.

There are educational programs which have a salutary effect on the entry of girls into sexuality and the unwelcome consequences of such entry. The quality of secondary education provided in the past tended to discourage teenage sexuality, not only because of the seriousness of the consequences of premarital pregnancy, such as expulsion from schools, but more positively, through the cultivation of values which cherished the institution of marriage and the undesirability of abortion. It may be that Nigeria has lost her innocence, but the active encouragement of sexuality by an indiscriminate access of secondary school and teenage population to pornographic materials, in the print and electronic media, cannot help in curbing teenage sexuality. The lack of supervision of school time and the absence of parental guidance are two of the cooperating factors which have produced the more spectacular of teenage pregnancy scandals associated without school system in the past ten years.

The unwanted pregnancy is, of course, not restricted to the teenage population. But for both the teenage and non-teenage, the consequences of an unwanted pregnancy can be made less dramatic or fatal by the provision of an institutional framework for relatively easy access to safe abortion services. Such services will include pregnancy testing for early identification of pregnancies as well as the professional counselling of persons requesting pregnancy termination.

Reducing the cost of an unwanted pregnancy to the pregnant woman may make as much, if not better sense than reducing the cost of an abortion to her. It is the bleak social prospects attached to some of the pregnancies that create the desperation in those seeking an abortion. Such prospects include rustication from school for the offending female student; divorce on the basis of infidelity; a feeling of shame at an inconvenient pregnancy, for example when the husband is known to be absent from the marital home or is dead.

Under the prevailing high fertility regime, it is worth noting that requests for abortion for these reasons are much likely to outrun those for the reason that the woman has enough children already. Although the provision of abortion to women who are carrying high risk pregnancies or have had too many children may be a technically valid solution to high fertility, there is the equally valid alternative of providing adequate information and services for family planning. The social and economic cost of the second alternative is likely to be much lower than the former to society and to the individual.

Those policies and programs which can be addressed at the intermediate variables should be those aimed at increasing the capacity of institutions providing abortions to carry out timely and safe abortions and to manage complications when they arise. It is tempting to believe that the starting point of such a capacity building exercise is the legalization of abortion. However, evidence is available to suggest that the training of the cadre of providers and the establishment of providing institutions should precede the legalization of abortion (Rogo 1989). The idea is not to delay legal access to safe abortion until such human and material resources have been fully built up. The transfer of the existing clandestine case-load to the existing approved health

facilities can be embarked upon by slight modification of existing laws of registration of facilities for services, including abortion, so that untrained and unsafe providers are excluded. Access to existing safe facilities can also be more liberal by attitudinal changes in providers, without the full impact of an abortion liberalization law. Providers need to be freed from their moral inhibitions as well as from any fear of legal consequences for abortions which they perform under approved protocols. Improvement in their competence to deliver services and a clear guideline as to who is entitled to an abortion will help in the process.

The creation of the attitudinal change in the individual woman carrying the unwanted pregnancy is, however, that much less easy to plan for. Her attitude is often the outcome of her individual circumstance as well as the values which she shares with the rest of society. In the past, the rationalization of a pregnancy or the product of the pregnancy would appear to have been much easier, through precipitate marriage, through divorce and re-marriage or through acceptance of paternity. But there is now a shift towards a harsh economic accounting of consequences that lead persons to see the inconvenient pregnancy as requiring a final solution. Marriages are less easily arranged, male partners are increasingly reluctant to accept paternity and pursuit of careers by women demand rigorous conditions including exclusion of a pregnancy.

There is some relationship between the load of unwanted pregnancies and the failure of the family planning services to provide contraceptives of the right type, at the right social setting for all who need them. Although not all unwanted pregnancies are due to the absence or failure of appropriate contraceptives, the low level of practice of contraception is a major contributory factor. The exclusion of teenage populations from the formal reproductive health education and especially from family planning information and services is a primary cause of the extent of teenage pregnancy and the attendant resort to abortion. Even women who are in marriages have no systematic access to family planning information and services. The lip service that family planning is part of Maternal and Child Health is apparent from the low levels of accurate knowledge of, and practice of modern effective contraception. Consequently, the effective control of reproduction is denied all women. Under such circumstances, abortion remains the only solution to the inconvenient and unacceptable pregnancy.

There are a number of other policies and programs relating to the enhancement of the outcome of abortions. These should address the liberalization of technologies so that the most efficient methods and procedures are made available and that training and facilities to support such methods are made known to the clients through effective counselling of patients.

SECTION 4 : A RESEARCH AGENDA FOR NIGERIA

The formulation of a research agenda for abortion should emerge from a process that takes account of the following factors. First, that there is no consensus about the need for the liberalization and legalization of abortion and the basis of the controversy spans ethical, religious and professional considerations. Second, that the state of knowledge of the true extent (as opposed to the hospital reporting) of the abortion epidemic is incomplete. Third, that the existing capacity for coping with the need for safe abortion is limited and the funding of the training and other needs of such services is not likely to be generous.

In view of these factors, it is possible to identify what features will be desirable in a research agenda for Nigeria. That agenda will need to contribute to raising awareness of the extent of the problem. To do this, the span of the research must be national, so that the many cultural and ethnic variations in values are studied, so that both rural and urban values are considered. In addition, the agenda must be comprehensive, paying attention to the many disciplinary interests in the topic. Another desirable feature of the agenda is that it should be realistic and recognize that abortions under unsafe conditions carry unacceptable social and economic circumstances. Out of this recognition will come a priority setting so that the most easily modified aspects of existing problems are first addressed. Such an approach will allow the benefits of safe abortion to be demonstrated to policy makers.

In recognition of the funding constraints, and in order to increase the maximum favorable change in attitudes, a few well chosen pilot projects at a number of sites and incorporating all the features described above may be the natural starting point. A multi-institutional, multi-disciplinary abortion initiative is the way to go. In such projects, the technical as well as the sociological aspects of abortion "demand and supply" should be studied. Outreach and counselling elements should be incorporated into the projects.

It is possible to identify the strands of a research agenda in terms of the gaps in existing knowledge of background variables to which we have referred in this papers. In this connection, projects should include the confidential documentation of cases so that the profile of clients and the circumstances leading to unwanted pregnancies and demand for abortion can be far better known than is now the case. The structure of services within the projects should allow for pregnancy testing services, counselling for appropriate family planning methods and the choice of abortion technologies to be available. The quality of professional performance within the projects should be consistently high. Comparative study of the outcome of various technologies and management regimes should also be carried out.

In setting the priorities for a research agenda, first, it is possible to hypothesize the most preventable high risk connections between background and outcome variables. Then the ease with which such hypotheses can be tested and their potential contributions to programs of management and improvement of services should be assessed. It is then that the structure of the specific project content and resource needs can be determined.

The overall effect of such an agenda will be to increase the competence of personnel providing services, the documentation of the procedures for the establishment of a responsive outreach abortion service and the understanding of the causes of unwanted pregnancies and the motivations for abortion as a solution of last resort for an unwanted pregnancy. The contribution of such an agenda to policy changes, health planning, manpower training and improvement of abortion services is likely to be considerable and cumulative.

CONCLUSION

In conclusion, abortion is still a red flag that elicits different responses within and outside the academic and medical communities. But since it is also a fact of life, then its systematic study within a comprehensive framework that draws attention to the background of those who demand abortion and to the circumstances that lead to a specific outcome of the process is worthy of the attention it is now receiving. It will be presumptuous of any one discipline or profession to set an agenda that address the range of substantive and methodological issues that have been raised at this seminar. Working in groups that cut across disciplines to arrive at priorities and at the detailed agenda is the way to go. It is hoped that the framework will assist the task of such groups.

REFERENCES

1. Brady M Medical Abortifacients - A new Technology Requiring New Research. In Methodological Issues In Abortion Research. Proceedings of a Seminar presented under the Population Council's Robert H Ebert Program on Critical Issues in Reproductive Health in Collaboration with International Projects Assistance Services and the World Health Organization, December 12-13, 1989, The Population Council, New York, New York, PP.107 - 109.
2. Rogo, Khama A Multidisciplinary Approach to Policy Oriented Research - An Example from Kenya in *ibid*, pp.115 - 119.

RECOMMENDATIONS OF THE WORKING GROUPS

A workshop was organised on the last day of the seminar to study the abortion issue in greater detail and make recommendations on how to reduce abortion-related maternal mortality and morbidity in Nigeria. Participants were allocated into four groups and were requested to study the issue under four corresponding sub-themes in order to (1) define research agenda priorities, (2) define resources available and needed, and (3) identify activities that can be undertaken immediately under each sub-theme to improve the situation.

The recommendations that were made under each sub-theme were as follows:

- (1) Epidemiology and clinical complications of unsafe and induced abortion

Under this sub-theme participants agreed that it was important to determine the prevalence of abortion in Nigeria and determine whether there are differences between urban and rural communities in the prevalence of abortion. They emphasized that this was an important information as it would enable government and non-governmental organizations concerned with health to assess the true extent of the abortion problem and plan a truly indigenous method of intervention. They recognized the difficulties in obtaining correct information on abortion from

women in Nigeria but recommended such innovative approaches as the use of trained peer interviewers and asking knowledgeable people in the community (women, health care providers, etc) to assess the size of the abortion problem. Such a study could also help determine the bio-social characteristics of women who seek induced abortion - i.e. their age profile, parity, marital status, socioeconomic status, educational level and religious background.

Regarding clinical complications of induced abortion, participants recognized that previous studies of abortion-related complications have been from large teaching hospitals. The size of the problem in smaller hospitals and private health institutions in urban and rural areas is presently unknown. The available teaching hospital data also have the limitation that they were mainly derived from retrospective analyses of case series which were often incompletely documented. Thus, the participants identified the need for a large, prospective, multicentre and long-term study of abortion complications in health institutions in Nigeria. It was recommended that such a study should involve randomly selected tertiary, secondary, primary and private health institutions in a defined geographical area and be structured to determine (1) the true rates of abortion complications at the different levels of care, (2) the clinical and bio-social factors that influence the rate of mortality and morbidity from abortion, and (3) the immediate health care needs of patients with abortion complications.

The participants recommended the following activities to be undertaken immediately under the sub-theme:

- * The participants recognized that the community was presently not fully aware of the dangers posed by unsafe abortion. This fact was thought to be responsible for the persistent use of dangerous abortifacients by women, the patronisation of 'quacks' and the delay in seeking health care by women with abortion complications. Thus, it was recommended that an education campaign using print and electronic media be embarked upon on a short-term basis as a way of informing women about the hazards of induced and unsafe abortion.

- * During the seminar, most discussants repeatedly emphasized the point that general medical practitioners and newly qualified doctors were responsible for a considerable proportion of abortions that result in mortality. Thus, the participants recommended the training and re-training of general medical practitioners in the use of the manual vacuum aspiration for the management of abortion complications. They also recommended the training of newly qualified doctors during their National Youth Service Year since this was the period they were most likely to try their hands on pregnancy termination.

- * The participants also recommended the training of nurses and rural health workers in the recognition and management of simple complications of abortion. In particular, the rural health workers should be taught to refer patients with abortion complications to higher levels of care and to offer them post-abortal contraceptive counselling.

- * Participants also noted that there was presently no provision for counselling of women who have had recourse to induced abortion. This is important in order to decrease the

rate of repeat abortions in the community and improve the knowledge and acceptance of contraception. They recommended the commencement of an organised program of counselling for women who have had induced abortion, which should include sex education and the provision of contraceptives. Such a system could form the basis of an organised family planning program for high risk groups such as unmarried adolescents.

* The participants also observed that one of the causes of abortion-related mortality is the fact that the hospitals often lack consumables and drugs to manage emergency complications of abortion. The delay that arises from attempts to procure the items from shops was identified as a key factor in mortality. To solve this problem, the participants recommended the establishment of a revolving fund in tertiary institutions for the management of gynecological emergencies. The fund would be used to purchase clinical items and drugs to be used during gynecological emergencies, but which would have to be paid for by the patients before they are discharged from the hospital.

(2) Current service delivery mechanisms and proposed alternatives to improve abortion and reproductive health for women.

Under this sub-theme, participants noted the present strict Nigerian national abortion law which denies access to safe abortion to women in government health institutions. Most terminations of pregnancy are done by 'quacks' and by medical personnel under private settings. The participants agreed that it was important to study the attitude of health care providers towards abortion. It is particularly relevant to determine the attitude of those practitioners who are most qualified to carry out safe abortion. It is also important to determine their actual practice of abortion and whether there is any difference between experienced practitioners and junior health professionals in their willingness to carry out abortion. It is also of relevance to know what practitioners do when women approach them with unwanted pregnancies. Answers to these questions will help provide a framework for devising alternative strategies for improving access to abortion for women in Nigeria.

They also agreed that it was important to study the cost of treatment of abortion complications in hospitals and compare it with the cost of treatment of other common gynecological or surgical conditions. Such data are relevant both for long term planning and for modification of policies on abortion.

The participants also agreed that it was important to study the quality and content of available contraceptive services and the distribution of the resources and technology in rural and urban centers.

The following activities were recommended under the sub-theme to improve the situation:

* Training of health personnel (a) at the primary health care level - for the early recognition of symptoms of abortion, prompt referral of patients and for counselling of

patients after induced abortion; and (b) at the secondary and tertiary care levels - the training of doctors in the use of manual vacuum aspiration for induced abortion and in the management of the more severe complications of abortion.

* The participants observed that existing family planning clinics are not patronized by unmarried adolescents because of the open nature of the clinics and the communities' cultural expectation which frowns on open admission of sexuality by unmarried adolescents. Thus, they recommended innovative approaches to the provision of contraceptives to adolescents such as the use of evening clinics, youth club clinics, school clinics and peer counsellors. The use of peer counsellors was thought to be particularly relevant since it was perceived that adolescents in Nigeria prefer to talk to their peers. The peer counsellors could also offer post-abortal contraceptive counselling and provide appropriate advice to adolescents with unwanted pregnancies.

* Since it was determined that most women prefer to visit private health institutions for family planning issues, it was recommended that private health institutions be assisted to provide cheap and qualitative family planning services to their clients.

* The participants also recommended the organization of periodic workshops for service providers to review service delivery and to update knowledge and skill.

(3) Social context of unwanted pregnancy and abortion.

Under this sub-theme, the participants agreed that it was important to study the social circumstances that produce pregnancies in unmarried adolescent girls since this was the type of pregnancy that was most likely to result in abortion. It will be important, for example, to study the age at which adolescents are first initiated into sex and the degree of sex networking in the communities. These could be studied also from the point of view of prevention of sexually transmitted diseases, including HIV infection, in the communities. It would be of particular interest to study the effects of such factors as parental socioeconomic background, marital stability of parents, place of residence, religion, and the educational level of the adolescent girls. They agreed that both quantitative and qualitative data (e.g. from focus group discussions) would be needed to uncover the hidden factors that predispose to unwanted pregnancy and abortion.

It would also be of relevance to study the knowledge, attitude and practice of contraception by adolescents and the factors which influence the use or non-use of contraceptives. The participants also recommended a study into the abortion seeking behavior of women so as to uncover the factors that lead women to seek particular methods of abortion. Such a study could be complemented with clinic-based data which would seek information on (a) the socio-demographic characteristics of women seeking termination of pregnancy and (b) the effectiveness of counselling in reducing the need for pregnancy termination.

The participants agreed that there was a need to study the adoption law of the country to determine whether this was a feasible option to propose to women with unwanted pregnancies.

The adoption law was presently not well developed in the country, part of the reason being the negative attitude of the community towards the process. In this regard, it would be necessary to study the attitude of the community towards adoption. The results of such a study could be used as a basis for sensitizing the community on the issue and convincing the government on the need to develop an appropriate adoption law in the country.

The participants proposed that a meeting be held with opinion leaders in the community (elders, spiritual leaders and teachers) on the issue of abortion. The purpose of the meeting will be to present the leaders with the data on the mortality and morbidity caused by abortion and its social consequences. The meeting should be structured so that the leaders themselves will be made to come out with what they feel are the social conditions that lead to abortion. In that way, the leaders will be made to derive solutions that are culturally appropriate and that will be respected by the community.

(4). Strategies to foster change in policy and the law.

In this sub-theme, the participants noted that the present Nigerian government is favorably disposed to liberalizing the abortion law. However, the obstacles in the way of liberalization were identified to be individuals opposed to abortion, some women's organizations and religious groups. The participants noted that there are several women's organizations in the country who are supposed to fight for the rights of women, but it is paradoxical that some of the most influential of them have consistently opposed moves to liberalize the abortion law. Indeed, a very senior Nigerian professor of obstetrics and gynaecology said during the seminar that he was convinced that the abortion law will be liberalized in Nigeria when women decide it is time to do so. Further discussion by participants revealed that opposition by women's groups was not based on any coherent ideological arguments but rather on lack of information or misinformation.

In this regard, the participants agreed that it was important to use qualitative and quantitative methods to determine the views of women and women's organizations on abortion. Such a study will be useful in devising strategies for mobilizing women for abortion. Clearly, attention needs to be drawn to the magnitude of the problem of unsafe abortion through concrete research and documentation and the reports should be made available to policy makers. Particular research that were identified as capable of fostering change in the abortion law are those that show (1) the high prevalence of abortion in spite of the law, and (2) the high morbidity and mortality from clandestine abortion. Research on the community's attitude towards abortion and the abortion law is also warranted to show that decision on abortion should be taken by a democratic process rather than by a vocal minority.

The participants recommended the following immediate activities under the sub-theme:

* A meeting involving the major women's groups in Nigeria. A background paper on the issue of abortion and its hazards in Nigeria should be presented to the women. Clearly, any differences between the groups can be understood and possibly resolved at the meeting. It is important that only leaders of important organizations who can speak on

behalf of those organizations should be invited to the meeting.

* A media campaign for liberalization of the abortion law should be launched. The issues should be presented clearly to the media and the more amenable members of the press should be incorporated into a media collective for abortion. The press coverage should include short documentaries on the problems of abortion, drama, radio programs, and talk shows. Women should be made to talk on these shows. The assumption should not be made that women will not speak out on their experiences.

* Short tracts could also be prepared giving information on mortality and morbidity and addressing the issue of causes. The tracts should also be written in the three major Nigerian languages and be distributed to both men and women.

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- 1... 1938 3 All England Law Reports p.615
- 2... See Section 307 of the Criminal Code and Section 5(2) of the Penal Code.
- 3... See Okagbue:1990 for an analysis of eight reported cases.
- 4... This may simply be a matter of concise drafting, as the woman can also be the abortionist.
- 5... See opinions expressed under the caption - "Should Abortion be Legalized" Sunday Concord October 13 1991, p.13