



**OGUN STATE UNIVERSITY**  
**AGO-IWOYE**  
Ogun State of Nigeria

**ELEVENTH INAUGURAL  
LECTURE**

**THE WOMB AND THE WOMAN  
AT THE CROSSROADS**

BY

**PROFESSOR O.O. ADETORO**

B.Sc. (Hons. Med. Sci.), MBBS (IB), F.M.C.O.G (NIG.), F.W.A.C.S (W.A.)  
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OGUN STATE UNIVERSITY TEACHING HOSPITAL

**25TH AUGUST, 1998**

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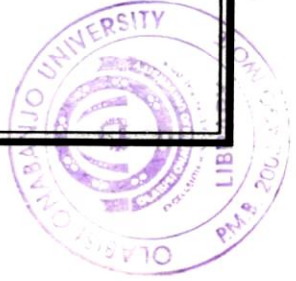
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## INTRODUCTION

Mr. Vice-Chancellor and Chairman of this occasion, Professor O. Y. Oyene, Deputy Vice-Chancellor, Registrar and other Principal Officers of the University, Provost, College of Agriculture, Deans of Faculties, Fellow Professors, colleagues, staff and students of this University, friends from sister Universities, friends of Ogun State University, distinguished ladies and gentlemen.

I wish first to express my profound gratitude to the Vice-Chancellor, and the entire Ogun State University for giving me the opportunity to deliver this Inaugural Lecture. It is a singularly unique honour.

As a newly appointed Professor is expected to deliver an Inaugural Lecture soon after his appointment, I have owed this great University an Inaugural Lecture for 6 years since my appointment to the Chair of Obstetrics and Gynaecology in 1992. As the great English Poet William Shakespeare said in *The Merchant of Venice*, "neither a borrower nor a lender be," I am standing before you today to liquidate my debt. At the same time, contrary to Shakespearean advocates, I wish to lend by sharing with this august gathering the subject of "The Womb and the Woman at the Crossroads: Which Way Forward?"

Mr. Vice-Chancellor, Sir, to me, the aim of an Inaugural Lecture is to allow a newly appointed or promoted Professor the chance to give an account of his/her scholarship. Such an account should seek to answer the following three questions:

- (i) What has been the main area of the Professor's research activities?
- (ii) In what ways does the research contribute to knowledge?
- (iii) What possible benefits does the society gain from this contribution to knowledge?

This Inaugural Lecture will be devoted to these three questions and other salient issues.

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It would probably be necessary to go down, briefly, the memory lane of my academic stewardship to justify this presentation. My initiation into academia was at Ilorin in Kwara State of Nigeria about one and half decades ago when I was appointed a Lecturer in the Department of Obstetrics and Gynaecology. However, the training at Ibadan and Manchester, U.K. served as the background to my academic work. At Ibadan, the Obstetrics and Gynaecological Unit was endowed with men of distinction such as the late Professors J. B. Lawson, Paul Van Hendricksen, P. P. S. Nylander and O. A. Ojo, and those still alive and active such as Professors V. E. Aimakhu, B. Adelusi, O. A. Ladipo, E. O. Akande, P. Ibeziakoh, J. A. Adeleye and B. O. Osinusi, and in Manchester, Professors Max Elstein and Eric Chantler. The tutelage under these men was inspiring and they stimulated my interest in Obstetrics and Gynaecology. Therefore, by the time I arrived in Ilorin, my focus was well defined and the pursuit of academic work became easy.

The excitement of becoming a Professor is usually short lived because the established tradition requires a junior Professor to deliver the next Inaugural Lecture. Fortunately, there is no long line of Professors awaiting this noble duty and consequently I have not been retired before this lecture. Now that I am privileged to profess in front of this critical and mixed audience of learned men and women, I feel highly honoured, and my joy knows no bound when I remember that this is the first Inaugural Lecture in Obstetrics and Gynaecology in this great institution.

It is in the midst of all this euphoria that I realize that all I can claim to profess on, after all, revolves around women. Men and women are both desirous of good health but the subject of today's lecture is concentrated on the womb and the woman.

This topic was carefully chosen because the womb and the woman have something in common, and that is reproductive health. In fact,



the decision to dilate on this topic is strongly informed by the knowledge that of all the divisions of health care services, probably one of the most sensitive is that of reproductive health care which is of great importance to the woman's well being and influences her status in the family and the society. Therefore, it is the purpose of this presentation to analyse the reproductive health needs of a woman before, during, and beyond childbearing.

Reproductive health is a condition in which reproductive process is achieved in a state of physical, mental, and social well being and is not merely the absence of disease or disorders of the reproductive system. However, before I elaborate further on this, it is important to first examine the womb.

The term, womb, evolves from the Latin word, *uteris*, which was a leather wine or water bottle, i.e. a container. Oribasius, the ancient Roman philosopher, went even further in defining the womb. He had three terms for it: *matrix*, *hysteros* and *delphos: matrix*, because it is the mother and measures the menstrual cycle, *hysteros*, because it functions late, and *delphos*, because life originates from it.

The womb is now defined in modern English as the origin of a child. It is a muscular organ inside a woman's belly in which a baby develops. It is also defined as an organ inside a woman's belly which receives and holds the fertilized egg until it has developed into a full-term baby and then by contracting its muscular walls, expels the baby during the act of parturition.

Now let us examine the woman. A woman is a female being or the female part of the human race or the female sex. According to Simeon de Beavour (1949), a woman is "*total mulier in utero*," i.e. a woman is a womb. But we know very well that the woman is not a womb but that the woman has a womb. Therefore, it is essential to examine the womb in relation to the rest of the woman.

We shall review this relationship under the following reproductive health issues: (1) infertility, (2) safe motherhood, (3) fertility regulation, (4) unsafe abortion, (5) fetal malformations, and (6) sexually transmitted diseases.

## INFERTILITY

As I reviewed this subject through a series of studies which I had conducted over time, I quickly remember the words of great philosophers that knowledge, like a baton, must pass from one hand to another. And since it is impossible to demonstrate here within an hour my 15 years of academic work, I shall implore you, like William Shakespeare in *King Henry V*, to use your imagination as I rush and skip over the times and events of my past. Of all the possible road crossings between the womb and the woman, the subject of the fruit of the womb is probably the most sensitive to the survival of all women. Hence I will devote part of this presentation to my contribution to the management of infertility.

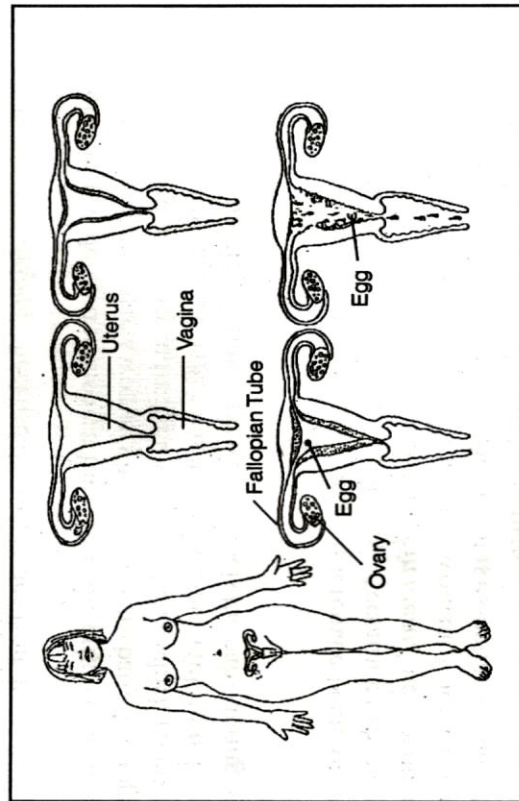


Figure 1: The Women and Her Reproductive System.

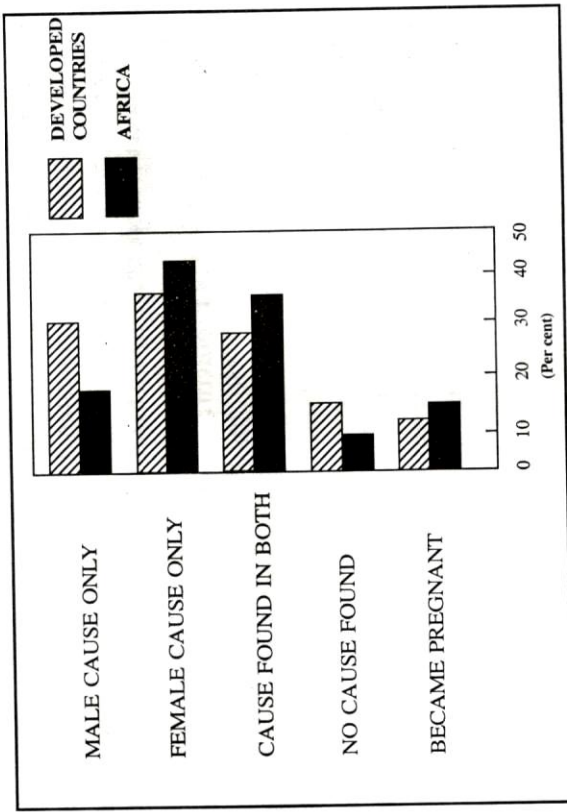


Chart 1: Distribution of the Causes of Infertility

Source: World Health Organisation.

Infertility is simply the inability to achieve a pregnancy within a specified period, usually one year. Although it is not a disease in the real sense of the word, it nonetheless constitutes an extremely important personal concern for many couples and a significant health problem for the community. In fact, the medical science has come to recognise infertility as a health problem with definite physiological, psychological, and social implications.

In less developed nations of the world, high fertility makes good economy especially because unpaid family labour may be critical for survival. Thus, the woman with many fruits of the womb remains more highly valued than the woman per se or her other contributions to the community. Against this background, it is easy to understand why, in most developing countries, infertility consumes a large proportion of reproductive health care resources.

In addition to the unpleasant consequences of infertility, the lack of standard definition, poor understanding of its causes, questionable diagnostic tests and relatively uncertain therapeutic measures, make the subject the more challenging to researchers.

### Scope of the Infertility Problem?

The World Health Organisation (WHO) estimated that 10 per cent of couples experience some form of infertility, that is, globally, about 50 to 80 million people, with about two million additional infertile couples added every year. Sub-Saharan Africa is estimated to have the highest prevalence of infertility. On the strength of this information, we commenced our research work with the examination of the prevalence of infertility in a rural Nigerian community. This study was the first of its kind using a systematic random sampling in the Shao community of Kwara State of Nigeria (see Tables 1, 2, and 3). It revealed an overall prevalent rate of 30.3 per cent giving an indices of 9.2 per cent for primary infertility and 21.1 per cent for secondary infertility. We discovered also that primary infertility is rare after the age of 30 years and acquired causes of infertility are responsible for the high prevalent rate (Adetoro and Ebomoyi, 1991).

We then examined the sociobiological factors influencing infertility in the same community. There, we identified that age, education and religion of the respondents but not their income had statistically significant influence on infertility. From the research findings, we recommended the urgent need for health education for the community to eliminate the dangers of traditional practice on infertility.

One area of infertility that poses a great challenge to medical world is that of male infertility (Fig 2). Although men as husbands and fathers are regarded as the central figure in marriage and reproduction, their role in infertility has been largely ignored especially in the developing countries.

	Illiterate	Primary Education	Vocational Education	Secondary Education	Total
Infertile	174	78	66	30	348
Fertile	131	119	20	27	297
Total	305	197	86	57	645
Proportion of Infertility (%)	0.57	0.40	0.77	0.53	0.54

**Table 1: Contingency Table of the Effect of Women's Education on Infertility  $\chi^2 = 35.830, 3 \text{ df } P < 0.001$**

Source: Adetoro & Ebomoyi (1990)

	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total
Infertile	6	41	108	82	51	58	346
Fertile	49	43	63	79	39	20	293
Total	55	84	171	161	90	78	639
Proportion	0.10	0.49	0.63	0.51	0.57	0.78	0.54

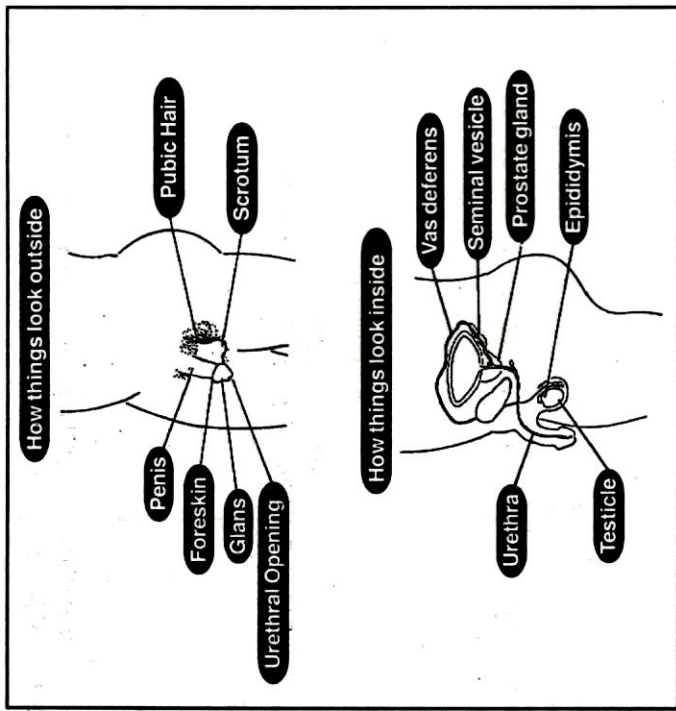
**Table 2: A Contingency table to examine the influence of Women's age on infertility  $\chi^2 = 65.094; 5 \text{ df } P < 0.001$**

Source: Adetoro and Ebomoyi (1990)

	Animists	Christian	Moslems	Unbelievers	Total
Infertile	18	173	143	14	348
Fertile	7	190	95	4	296
Total	25	363	238	18	644
Proportion of Infertility	0.72	0.48	0.60	0.78	0.54

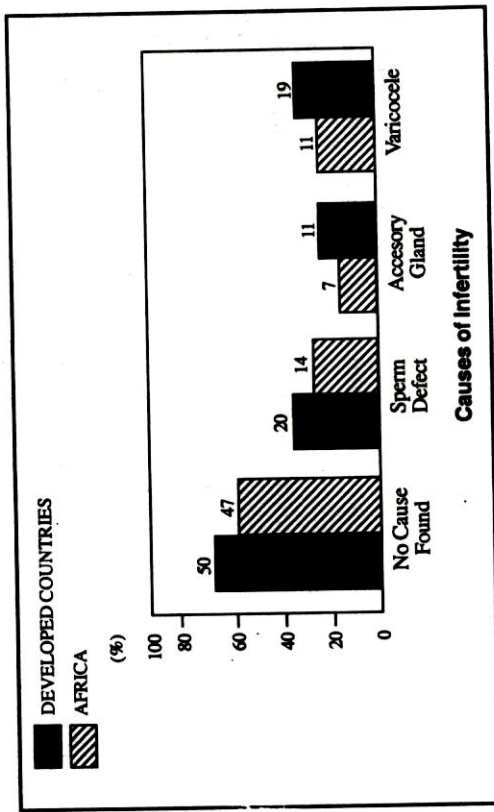
**Table 3: A Contingency Table to Examine the Influence of Religion on Infertility  $\chi^2 = 20.559, 3 \text{ df } P < 0.05$**

Source: Adetoro and Ebomoyi (1990)



**Figure 2: The Male Reproductive Organs**

However, as knowledge advances, the male factor in infertility management assumed prominence but, unfortunately, in over 50 per cent of infertile male, the cause is unknown. Hence, there is a great urge for investigations.



**Chart II: Specific Causes of Male Infertility**

Although, numerous diagnostic tests are available, most cases of male infertility do not respond to treatment despite the use of expensive drugs or surgical procedures.

Furthermore, the seminal fluid analysis as a test of choice in male infertility is fraught with the problem of standardisation especially because of the variations obtained in the results between laboratories and between technicians in the same laboratory. Indeed, variations of up to 25% are not unknown. More importantly, the laboratory procedures employed in the analysis demand standardisation, precision, responsibility, sensitivity, relevance and validation by independent method. It is in recognition of these requirements in semen evaluation that the conventional subjective method of analysis becomes less favoured. Consequent upon the unsatisfactory nature of the subjective methods, the objective techniques were developed. The advent of Makler's counting chamber and computerised laser method allowed for more accurate objective tests. Indeed, electron microscopy and magnetic resonant imaging are now routinely used in some centres to detect ultrastructural abnormalities of the sperm.

In recognition of this advancement, we utilised the multiple exposure photographic (MEP) technique and the laser scattered method for the objective assessment of seminal fluid in order to compare their effectiveness and their reproducibility. In order to do this work, we had the privilege of a tutelage at the University of Manchester, U.K. under the distinguished Professors of Gynaecology and Obstetrics and Reproductive Biochemistry. Our research study on the seminal fluid in that University provided a sound understanding of the subject of male infertility. The study revealed that the two methods of sperm density and motility assessment are more reliable and consistent (Adetoro, 1987, 1988, Fig. 3)

The process of the research involved the multiple exposure photographic technique. Then, the laser assessment of the semen followed. The laser method of analysis was completed in a maximum time of 30 seconds. The two objective methods of assessing the sperm density and motility demonstrated a satisfactory correlation, and, consistently, produce reliable results on percentage sperm motility (Table 4). We confirmed that the new objective methods are simpler, more reliable, and have the advantage of information storage, re-examination of data, and comparison of results. We therefore recommend their use in producing permanent records that can be used to assess the progress of therapy. In addition, we strongly advocate the use of multiple exposure photographic technique in developing countries like Nigeria because it is simple to operate and cheap to set up (Adetoro, 1988).

With these findings, we evaluated the seminal fluid of the infertile men in the clinic and treated their wives with homologous artificial insemination using split ejaculate. Of the 29 couples so treated, five pregnancies occurred. We therefore concluded that there is a place for the use of artificial insemination of homologous semen in male infertility management and this treatment deserves more attention (Table 5, Adetoro, 1988).

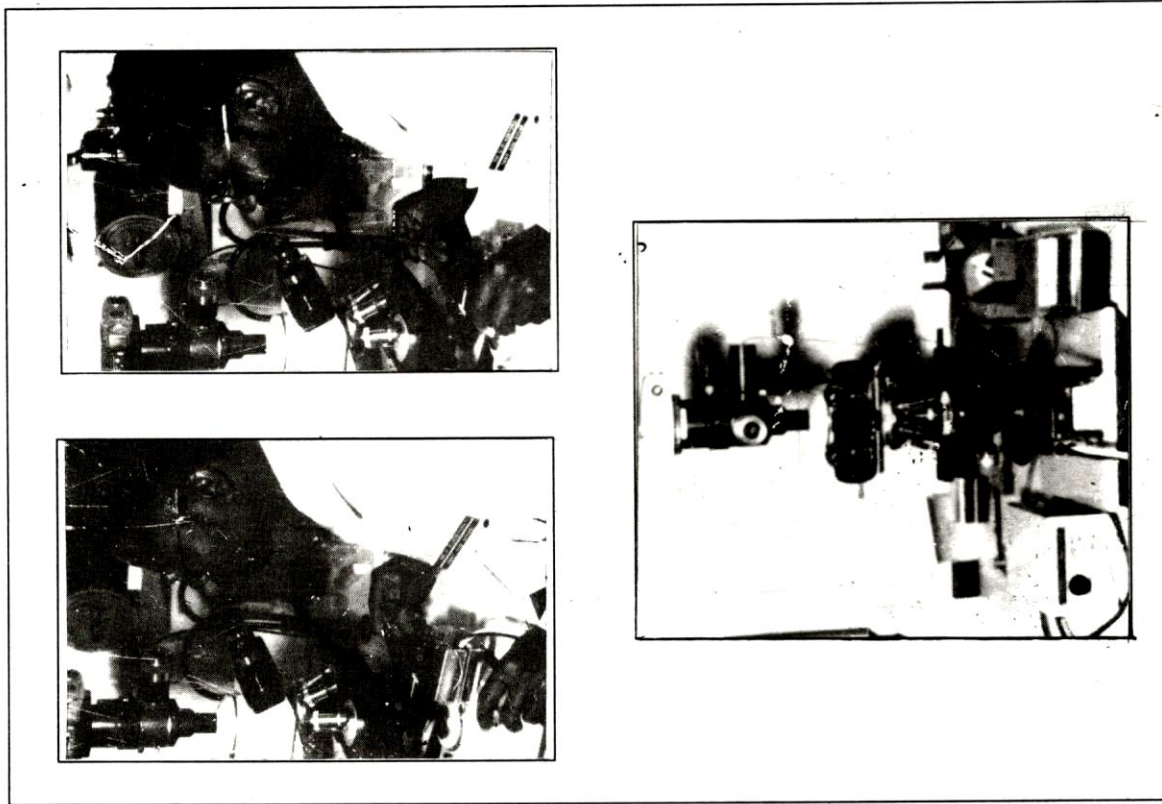


Figure 3: Laser Method for Sperm Examination



No. of Insemination Per Cycle	No. of Patients Treated	No. of Successes at Cycle	Total Success	Total No. of Insemination
2	8	1 2 3 4 5 6	2	86
3	21	1 0 0 0 0 1	3	357
5	19	0 0 1 2 0 0	5	443

**Table 5: Cycles of Insemination of the Women Treated with AIH**

Source: Adetoro (1985)

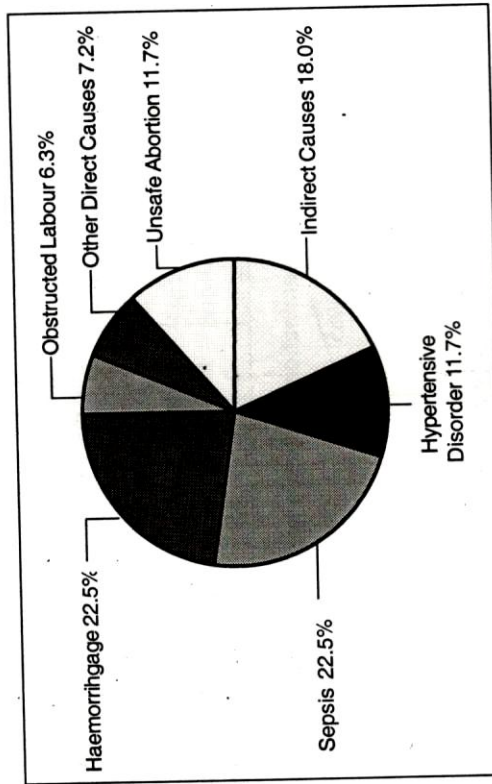
### SAFE MOTHERHOOD

The other areas where the womb and the woman are at the cross roads is on maternal mortality. This part of the lecture addresses the reality that confronts the woman and the womb. We shall therefore present from my research findings the factors identified as being responsible for high maternal deaths in our community and proffer remedy for them.

In the meantime, I wish to seek your permission to briefly review the challenges of maternal mortality. In so doing, we should reiterate that pregnancy is not a disease and from time immemorial, childbirth is universally celebrated. It is a time for joy, dancing, fireworks, and presentation of gifts. But for some women, the experience of childbirth is not a joyful one but a disappointment, sometimes with fatal outcome. Indeed, series of studies conducted by WHO have shown that, globally, over half a million (585,000) women die yearly during child birth with approximately 99% occurring in the developing countries. Also, a further examination of the phenomenon of maternal death, worldwide, revealed that over half of the deaths occur in Asia. While most of the remaining deaths, i.e. approximately 150,000 occur in Africa, in Nigeria, alone, over 50,000 women die every year from problems related to pregnancy and childbirth.

Serial No. for the Semen Specimen	Mean Percentage Motility	
	Ordinary Microscopy	MEP
1.	60	48
2.	40	44
3.	75	47
4.	70	34
5.	30	31
6.	80	30
7.	60	52
8.	90	73
9.	90	62
10.	80	25
11.	84	34
12.	78	39
13.	40	43
14.	70	50
15.	80	70
16.	50	50
17.	60	37
18.	40	49
19.	50	33
20.	80	17
21.	75	66

**Table 4: Percentage Sperm Motility Using MEP and Ordinary Microscopy Method**



**Chart III: Causes of Maternal Deaths in Developing Countries**

Surprisingly, in my research efforts as in those of others, no one knows exactly how many women die yearly as a direct consequence of pregnancy. What is clear is that most of those that died are poor, live in rural areas and their deaths are accorded little importance. Worse still, in some parts of the world where maternal mortality is highest, maternal deaths are rarely recorded and when they are, the causes of deaths are usually unknown. It is therefore this unpleasant situation of maternity in most developing countries that stimulated my research into this major tragedy.

First, I started with an epidemiological research study which was based on a comprehensive analysis of a 12-year (1972-1983) review of maternity in Ilorin. The work revealed some fundamental facts on safe motherhood.

To start with, for those familiar with the Maternity Hospital, Ilorin, you would remember vividly that it was a centre of activity for delivery in the seventies and early eighties. Indeed, before it was upgraded to a teaching hospital, it served as the only Specialist Maternity/Hospital

Year	Total deliveries	Total deaths per year	Maternal death/1000
1972	5752	36	6.3
1973	6756	45	6.7
1974	7718	39	5.1
1975	9053	52	5.7
1976	11228	62	5.5
1977	12530	72	5.7
1978	13120	80	6.1
1979	13146	77	5.9
1980	14844	70	4.7
1981	15779	91	5.8
1982	17278	75	4.3
1983	11373	39	3.4

**Table 6: Annual Maternal Mortality at the University of Ilorin Teaching Hospital (U.I.T.H.) (1972 - 1983)**

Source: Adetoro 1987

for the whole Kwara State, and beyond and the maternity records in that hospital had become archival material. Hence, medical data from 1972 to 1983 were available for analysis and thereby served as a major resource base for this work.

My pioneer work on this subject was based on the analysis of 138,577 births recorded between 1972 and 1983. The objectives of the study were to **determine** the trend of maternal mortality at the University of Ilorin Teaching Hospital; (ii) **establish** the causes of death; and (iii) **identify** ways of minimizing the frequency of preventable maternal deaths. In the course of this research, four important factors emerged on the facilities in the hospital. One was that the major blood bank serving the maternity hospital as at that time was located at the other arm of the teaching hospital which was 4 kilometers away, and the maternity ward itself was served by only a small blood bank unit which

operated from 0800hrs to 1600hrs daily. Thereafter, all the emergency blood grouping were done 4 kilometers away.

Second, the delivery suite had a toilet opening directly to the passage between the admission room and first stage room. Also, the windows in the delivery suite opened directly to the outside space. Third, the only operating theatre led directly to the outside through a small corridor and the theatre was served by a totally inadequate single unit air-conditioner, which rarely worked well continuously for 24 hours. Finally, nurse anaesthetists provided most of the anaesthetic services.

With this background, it was not surprising that the results of the data analysis over the 12-year period revealed that 624 maternal deaths occurred, accounting for an unacceptably high maternal mortality rate of 450/100,000 (Table 6). The major direct obstetric causes of death were haemorrhage, ruptured uterus, and obstructed labour, and the most important indirect causes were cerebrospinal meningitis, pulmonary infections, and fulminating hepatitis. The main avoidable factors were ineffective and cumbersome blood transfusion services, poor management of third stage of labour, large number of unbooked cases, and poor delivery room structure encouraging sepsis. As a result of these findings, I recommended integrated maternity services for the hospital. In addition, I strongly advocated health education of the public and, in particular, for the expectant mothers. Furthermore, I stressed the need to make available an effective blood bank within the maternity hospital premises. The implementation of these recommendations allowed for a remarkable improvement on maternity services. I therefore identify through this analysis the magnitude of maternal deaths in the community and emphasise the need for better planning of the maternal health service (Adetoro, 1987).

In addition to the above, I conducted many other notable researches on this subject. The studies were published in international journals and the result of the findings provided a strong basis for the support received from the Carnegie Corporation of New York by the University of Ilorin to conduct research on genital infections and maternal mortality. That study, in which I was privileged to serve as the Project Director, defined clearly again the interventions needed at the primary, secondary, and tertiary health care institutions. Indeed, when the interventions were introduced, there was a drastic reduction in maternal death rate in the community (Adetoro, 1989, 1989, 1990, 1990, 1991, 1991). It, however, requires the will and the wallet to sustain the intervention for a permanent reduction of the maternal death to the barest minimum.

From these studies, we clearly established the magnitude of the problems of safe motherhood in our community. We emphasise and, strongly, recommend that it is only by raising women's status through an improvement in their education, living and working conditions that would bring about a permanent safe maternity. As a step further on the promotion of safe motherhood, our team in Ogun State University in a WHO Collaborative Study is currently examining the value of misoprostol in the management of third stage of labour. This drug, if found effective, can prevent excessive blood loss at delivery, thereby preventing post-partum haemorrhage which is a leading cause of maternal death (Adetoro, Dada, Olatunji, and Sofekun, 1998).

While still concentrating on safe motherhood, it is apparent that the issue of fertility control is still not widely accepted world wide, despite the adverse consequences of uncontrolled fertility and unplanned pregnancy on the womb and the woman. Therefore, I shall now examine family planning programme in general to illustrate the way forward for the woman and the womb. In order to do this, it is essential to examine, briefly, the implications of the world population density on the woman.

Presently, world population is too high for comfort. One of the most complex issues of the second half of the 20th century is the population problem, described by some as the 'population explosion.' While these statements might be debated by some, current rates of population growth, particularly in developing countries, are extremely high and, if they continue, pose serious problems for the future. Averagely, 90 million people are added to the world every year with 79% of this to the developing countries. If the trend continues unchecked by the year 2100, the whole universe will be covered by just human beings without any forest (United Nations for Population Activities UN-PA) At that rate, demographers believe, the pressure on the earth's resources would be unsustainable leading to a degraded environment. Available records revealed that the world's population is now 5.8 billion with 1.2 billion residing in the developed world and 4.6 billion in the developing countries.

In Nigeria, the official population figure is 88.5 million, but the general consensus is that the real estimate is about one hundred and twenty million with an annual growth rate of 3 per cent thus ranking the country among the highest in the world. Moreover, many women, especially those that are poor and those that are living in the rural areas, face unplanned pregnancy because of inadequate information and education on family planning services. The dangers of this ignorance are severe and often result in high mortality.

However, inspite of the fact that the primary objective of the family planning programme is to help the women to avoid unwanted pregnancies and achieve their fertility goal safely, the poor physical facilities, lack of privacy, the negative and sometimes hostile attitudes of service providers make the programme an ordeal for many potential clients in the developing countries (Table 9).

Reference	Year	Centre	Maternal Mortality rate/1000
11	1973	Eastern State of Nigeria	17.1
6	1975	Western Nigeria	4.7
8	1974	U.C.H., Ibadan	8.2
5	1975	U.I.H.E., Enugu	13.5
7	1976	U.B.T.H., Benin	6.9
4	1977	A.B.U., Zaria	10.0
12	1977	L.U.T.H., Lagos	8.5
Per cent Series	1984	U.I.T.H., Ilorin	4.5

**Table 7: Maternal Mortality Rate in Different Centres in Nigeria**

Source: Adetoro 1987.

Direct causes	No. of Maternal deaths	Percentage deaths (%)
Post-partum hemorrhage	100	16.0
Ruptured uterus	87	13.9
Obstructed labour	74	11.9
Eclampsia	70	11.2
Septicemia	52	8.3
Antepartum hemorrhage	51	8.2
Severe anemia	47	7.5
Hemoglobinopathies	7	1.2
Anesthetic death	4	0.6
<b>Total</b>	<b>492</b>	<b>78.8</b>

**Table 8: Direct Obstetric Causes of Maternal Death (Excluding Abortion and Ectopic Pregnancy)**

Source: Adetoro 1987

	Women Aged 15 - 49 (X1,000,000)	Using any Method (%)
Developing Countries	892.3	45
Developed Countries	296.0	70
World	1188.5	51

**Table 9: World Contraceptive Use**

Indeed, a recent national survey on Family Planning in Nigeria revealed that only 46 per cent of the women know of a contraceptive method, while only 6 per cent of married women are currently using contraception. The national demographic data also revealed that about 21 per cent of the married women have an unmet need for family planning (Lacey, Adeyemi and Adewuyi, 1997). As a result of this report, we studied the attitudes of 1,968 prospective clients towards family planning services in urban and peri-urban communities at Ilorin between November 1983 and April, 1985 (Table 10). Amongst the peri-urban communities, we found a statistically significant relationship

Sex	Urban Area			Peri-Urban Area		
	Yes	No	Total	Yes	No	Total
Males	40	19	59	46	29	75
Females	719	199	918	676	420	916
Total	759	218	977	722	269	99

$$X^2 = 3,54 \text{ d.f.} = 1, P > .05 \quad X^2 = 4.4 \text{ d.f.} = 1, P < .05$$

**Table 10: A Comparison of attitudes towards family planning information by sex and geographical location (Responses based on the question: Are you interested in the family planning information provided at the Primary Health Care Center)**

Source: Ademoyi, Parakoyi & Adetoro (1987)

between sex and attitudes towards family planning information and family planning devices whereas the dwellers in urban areas indicated less positive attitudes towards family planning information and services. Our findings were attributed to some traditional practice in the community and relatively young illiterate population studied (Ebomoyi, Parakoyi, and Adetoro, 1987). Family planning devices utilized at the Primary Health Center (PHC) include condom, diaphragm, intrauterine method (IUD), douching, pill method and the combined oral contraceptives. Other non-appliance devices include abstinence, exercise, cultural belief and religious observances.

Another study conducted on student mid-wives revealed a high level of awareness of contraception. We recorded that contraception is widely practised by the student mid-wives but many use less effective methods. We identified that the condom is the most favoured contraception and we recommended that it should be promoted further since it requires no formal preparation and has the added advantage of reducing the incidence of venereal diseases (Adetoro and Anate, 1988).

Our recommendations from these researches placed emphasis on the fact that Nigerian women should be encouraged to have a limited number of children at an interval of not less than 2 years, especially, as this is central to the quality of their lives and has an important consequence for the future of the nation (Ebomoyi and Adetoro, 1988; Adetoro and Anate, 1989).

In Ogun State University, we examined further the issue of fertility regulation and we studied emergency contraception and barrier method. We observed that despite the fact that emergency contraception had been known for over three decades, there is a poor knowledge of its use. Our research revealed that poor service delivery systems and lack of the societal acceptance of the reality of sexuality among the youths contributed to its improper usage. With regards to female condom, our preliminary investigations revealed that when men refuse

Types	Group A Condom	%	Group B Other	%	Total	%
NIL	236	57.1	130	29.9	366	80.7
Nausea	11	2.3	10	2.2	21	4.5
Dizziness	4	0.9	9	1.9	13	2.8
Menorrhagia 3	0.6	5	1.1	8	3.0	
Cramps	3	0.6	5	1.1	8	3.0
Headaches	7	1.1	9	1.9	126	1.9
Weight gains 3	0.6	7	1.3	10	1.7	
Scanty Menses	3	0.6	5	1.1	8	1.3
Intra menstrual bleeding	2	0.4	4	1.9	6	1.3
Delayed menses	0	0	6	1.3	6	100
<b>Total</b>	<b>272</b>	<b>58.8</b>	<b>190</b>	<b>41.2</b>	<b>462</b>	

**Table 11: Side Effects of Contraception in the Two Groups of Student Midwives  $\chi^2 = 33.693$  at a 0.05**

Source: Adetoro & Anate (1988)

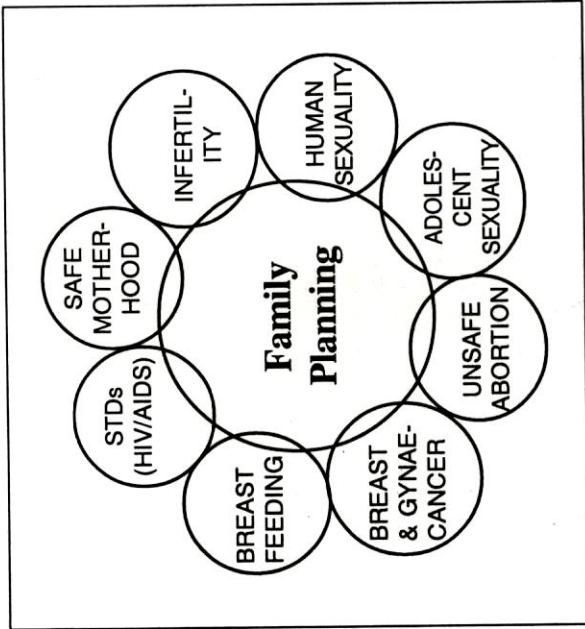
to use condom women would prefer to have an option that is under their control. Such an option like female condom should serve the dual purpose of prevention of unwanted pregnancy and sexually transmitted diseases including AIDS. These studies and many others are still on-going in our research centre at Ogun State University in collaboration with WHO.

One controversial issue of great concern, for the woman and the womb is the issue of abortion. Abortion is an old traditional practice. In fact, traditional communities had various ways and means of terminating pregnancies including herbal concoctions, insertions, and manipulation of dangerous sharp objects on the womb. But why should a woman want to terminate a pregnancy? Some women have felt the need to terminate pregnancies because the pregnancy occurred out of wedlock or because they considered that the child would be a burden on them.



**Figure 4: Family Planning Programs should involve Youth in Designing Services**

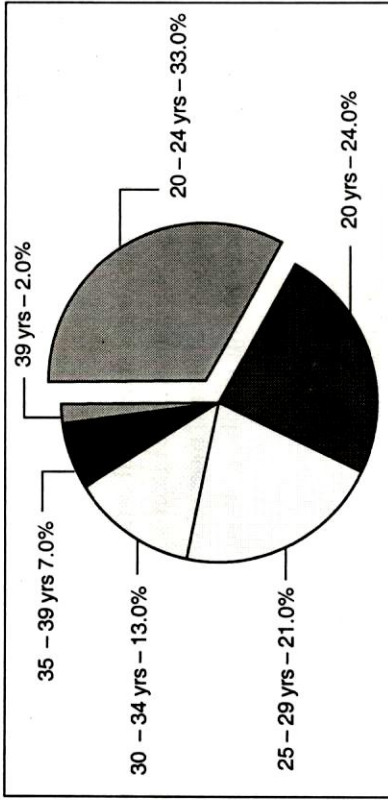
Regrettably, as abortion is resorted to, many religious and opinion leaders have reservations on the public sanction of the practice. Indeed, all efforts to liberalise abortion have been frustrated by policy makers and community leaders, and the community is accused being hypocritical because there are many personalities whose wives, girlfriends, mistresses, and daughters had terminated pregnancies with their full knowledge and acceptance (Charts IV & V). Therefore, irrespective of our attitudes towards abortion, we must recognise the magnitude and complexities of the problems facing the woman with unwanted pregnancy. Despite this, it is of note that every year, 75 million women all over the world suffer from unwanted pregnancies. Many of these women seek termination by recourse to abortion.



**Figure 5: The Role of Family Planning in Reproductive Health**

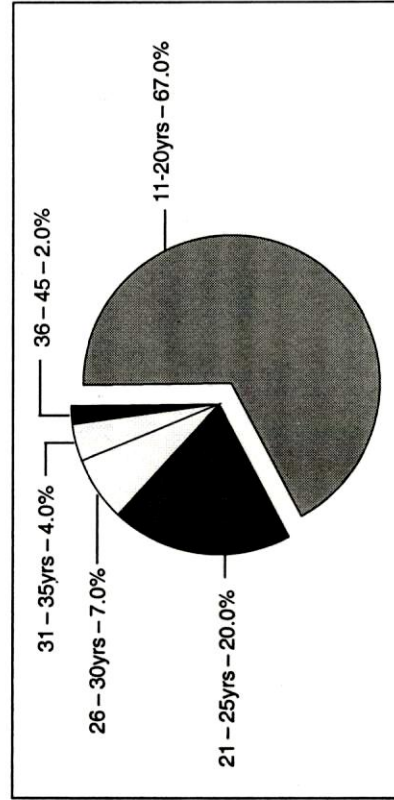
Source: *Otolorin E. O. (1997)*

Curiously, in most developing countries, safe abortion is not available, hence these women often risk their lives and health by having unsafe abortion. Indeed, an estimate of 20 million unsafe abortions occur yearly and kill over 70,000 women, and at least, 95 per cent of the unsafe abortions take place in the developing countries. In Africa alone, about 3.7 million unsafe abortions are performed annually and approximately 23,000 deaths occur from these procedures. Apart from the women that die, many more millions suffer long-term disabilities including chronic pelvic pain, pelvic inflammatory disease, tubal blockage and infertility. Under the Nigerian law, performing an abortion is a criminal offence unless the pregnancy threatens the woman's life, and the penalties for the offence are severe. In view of the legal restriction and because of religious and social norms opposing abortion, the practice of abortion is covered in secrecy and it is



**Chart IV: Extent of Abortion Among Women of Different Ages**

Source: Canada; National Data Based on Legally Performed Abortions Statistics.



**Chart V: Extent of Abortion Among Women of Different Ages**

Source: Nigeria; Data Obtained from Hospital Study of Women Seeking Treatment for Septic Induced Abortion (O.O. Adetoro)

performed by unskilled providers under unsanitary and dangerous conditions.

Also on account of the illegal status of abortion and the social stigma that accompanies it in Nigeria, precise information about it is difficult to obtain with a staggering maternal mortality rate of 800 deaths per 100,000 abortion, accounting for about 25 per cent of all maternal deaths.

In an attempt to address the problems of illicit induced abortion, I examined the outcome of septic-induced abortion in Ilorin. (Adetoro, 1986, 1990). During the period of eighteen months of the study, I recorded 102 cases of induced abortion out of a total of 852 cases of abortion admitted for the period. The majority of the patients were unmarried teenagers, and 87 out of the 102 cases were students. Five of the patients died of septic shock and one other died of respiratory arrest complicating severe tetanus. The study revealed a staggering maternal mortality of 590 deaths per 100,000 abortions. I, therefore, recommended that easy access to contraception, routine sex education, and liberal abortion law would greatly contribute to reducing septic-induced abortion to the barest minimum in Nigeria (Adetoro, 1986).

#### FEMALE GENITAL MUTILATION

One other dilemma faced by the woman and her womb is female genital mutilations and congenital malformations. Female genital mutilation is a dangerous cultural tradition aimed, erroneously, at reducing sexual appetite of women. The procedure is also performed because of tradition, religion, cultural heritage, and inhibition to clitoral growth. In some cultures, there is a strong superstitious belief that any newborn baby that touches the clitoris of the mother as it passes through the birth canal will die immediately after birth. On this basis, I investigated a case of mutilation in a pregnant woman. The study revealed clearly the unwarranted suffering inflicted on the women out of ignorance. I

Figure 6: For a low-risk pregnancy, the woman's home is perfectly alright so long as hygiene can be assured and the woman can be transferred to a referral centre in an emergency.





also highlighted the importance of the need to discourage this hazardous age-long cultural practice through health education of the community.

Congenital malformation is another area of great concern for the woman and the womb. This is a condition when the baby inside the womb is abnormal and this is often referred to as fetal malformation. Although congenital malformations are well known from time immemorial, and in fact, primitive man illustrated them on carved stones and woods, unfortunately, reports of abnormal babies in Nigeria are always covered in ignorance and mystery. But in pursuit of academic medicine, I and my colleagues, Professors Komolafe and Anjorin, encountered rare cases of congenital abnormal fetuses. Notable among these are hydrolethalus, syndrome, thanatophoric dwarfism and recurrent anencephalic babies. Hydrolethelus Syndrome was first recorded in Finland as a Finnish disease (Salonen *et al* 1984). To the best of our knowledge, we were the first to report two cases of this syndrome in Africa. Also, for the first time, we described the associated healing fracture of the long bone, which was not identified in the original report because those cases were not subjected to post-partum radiograph. This rare syndrome has since been incorporated into standard textbooks in Paediatric Radiology; Syndromes of Head and Neck and in Bone Dysplasia (Fig. 7 & 8).

The other congenital abnormal fetus we studied was thanatophoric dwarfism, and it was also in fact the first to be reported in Nigeria (Komolafe and Adetoro, 1987). Another important congenital malformation studied was three consecutive recurrent anencephalic babies. The findings in this case were an opus magnum as there has been little attention to local environmental factors on this problem. (Adetoro and Komolafe, 1984; Adetoro and Ogunbode, 1986, Komolafe and Adetoro, 1986; Adetoro 1987). Our study revealed the close association between herbal preparations administered early in pregnancy to the occurrence of this congenital malformations. Indeed, the research yielded positive effect when we convinced the patient to desist from the specific herbal preparation routinely ingested in early



Figure 7: Clinical photograph showing short deformed limbs, narrow chest, low-set deformed pinna, and slight macrocephaly

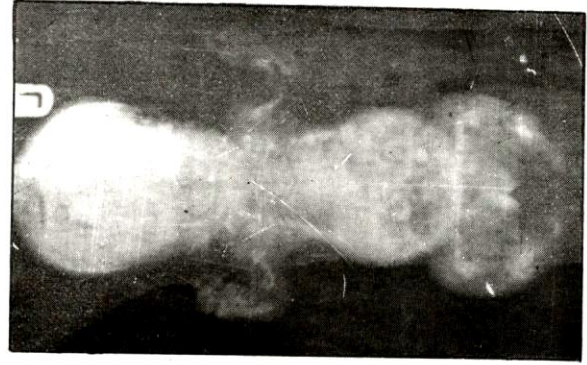


Figure 8: Post-mortem antero-posterior radiograph. Note deformity of the long bones, particularly severe bowing of femur, resembling telephone receivers.

pregnancy in their community. The effect of which was a successful outcome of the next pregnancy in the woman resulting in the delivery of a normal, well formed baby. Therefore, we established that these fetal abnormalities are rare and their reporting would create awareness and assist in further management and counseling of parents.

### SEXUALLY TRANSMITTED DISEASES (STDs)

Another remarkable event that makes the womb and the woman to be at the crossroads is in the area of sexually transmitted diseases (STDs). STDs are major problems in the world today yet they receive little attention. This is perhaps because with the conquest of syphilis, they do less damage to man than to woman. Evidence of the affliction of STDs in published history is poor, and indeed, specific venereal diseases were not identified in the middle ages and earlier. Amongst the famous people known to have suffered from STDs included Julius Caesar and his bedfellow Marnuria as well as Cleopatra and her soldiers. It was also recorded that King Herod of Judea, Henry I of France (1337 – 1380) Adolf Hitler (1989 – 1945) Alexander Pope (1431 – 1501), were in the list of notable figures that had suffered from STDs.

According to WHO, STDs are the most common notifiable diseases and the prevalence rates are particularly high in developing countries like Nigeria. Every year, there are 250 million new cases and some of these are complicated by chronic abdominal pain, ectopic pregnancies, and infertility in women. Some STDs account for major tragedies for a young woman in Africa because they promote the transmission of HIV/AIDS. Many STDs and, in particular, HIV can be vertically transmitted in pregnancy to the foetus with devastating effect on the new born baby. The rate of vertical transmission of HIV is believed to be 25 to 30 per cent. The major dilemma now is the scourge of AIDS as it affects even more women than men in Africa today. The male to female ratio of 1:1 at the beginning of the epidemic has now shifted to 1:1.4 in Africa as against 8:1 in USA and 5:1 in Western Europe. The incubation of HIV infection to develop into AIDS which is up to 10 years in men is believed to be shorter in women. Factors such as poor

health and social status, polygamy, other STDs, malnutrition, poor access to care and genital mutilations are responsible for easy transmission of HIV in women.

In Nigeria, the most current record shows that about two million people are living with HIV virus while 103,000 AIDS related deaths have been recorded. Also, blood transfusion is a major source of infection if not fully screened. Indeed only 50 per cent of the 114 screening centres in Nigeria are currently functioning. The implication is that less than 60 per cent of blood used in Nigeria is screened for HIV. The gloomy situation in Nigeria calls for a rethinking on the part of the government to enforce family life education and sex education in schools especially as we know very well that sex education is totally different from the act of coitus.

In view of the magnitude of the problems of sexually transmitted diseases, we were prompted to research into this. We studied the pattern of sexually transmitted diseases in a newly established clinic in Ilorin between June 1983 and December 1984 (Tables 12 & 13). Out of the

Region	Adult Infection Rate* Mid-1996	Women and Percent of Those Infected
Sub-Saharan African	5000	52 – 55
Caribbean	1400	40
South and SE Asia	500	25 – 33
Latin America	500	18
North America	500	14 – 17
W. Europe	200	14 – 17
North Africa/Middle East	120	20
Eastern Europe/Central Asia	15	14 – 17
East Asia/Pacific	4	14 – 17

**Table 12: Global Prevalence of HIV Infection**

\*Number infected per 100,000 people ages 15 – 49

Features	No. of Cases	Percentage
Discharge	26	56.5
Discharge + Dysuria	9	19.6
Discharge + Low abdominal pain	4	8.6
Discharge + Irritation	3	6.5
Irritation alone	1	2.2
Low abdominal pain in female	1	2.2
Discharge and swelling of penile shaft	1	2.2
Frequency of Urination	46	100

**Table 13: Common Presentations in Patient with Gonococcal Infections at Ilorin, Nigeria.**

Source: Odugbemi, Onile, Adetoro et al. 1986.

total of 321 patients screened, 278 (80%) had definite STDs. The commonest STD was non-specific genital infections (21.8%). From the study, we recommend that adequate investigation should be done for satisfactory management of STDs in Nigeria (Odugbemi, Onile, Adetoro et al, 1986).

In conclusion, I wish to propose the type of relationship between the womb and the woman in the 21st century. As you all know, the only thing that is predictable about the future is its uncertainty. However, the areas of common interest for the womb and the woman should include preconception care, prenatal diagnosis and intrapartum management. The role of genetic and fetal medicine is bound to attract more attention in the coming century and this would affect the woman and the womb especially in the areas of pre-pregnancy counselling, pregnancy screening for genetic diseases, congenital anomalies, inherited disorders, and chromosomal abnormalities. The role of assisted conception will become more prominent especially in less developed nations of the world and the value of gene therapy in obstetric care will prove fascinating. As the race for technological advancement continues in the coming century, early pregnancy fetal well-being will receive more attention because there would be an improved research

Age in years	No. of Cases	Percentage
Under 1 year	1	0.3
1 - 4 years	4	1.2
5 - 9 years	2	0.6
10 - 15 years	1	0.3
15 - 19 years	19	5.9
20 - 24 years	96	29.9
25 - 29 years	97	30.2
30 - 34 years	49	15.3
35 - 39 years	25	7.8
39 years	19	5.9
Not stated adult	8	2.6
<b>Total</b>	<b>321</b>	<b>100</b>

**Table 14: Age Distribution on Patients Attending Sexually Transmitted Diseases Clinic in Ilorin, Nigeria**

in foeto-maternal medicine. The aetiology of miscarriage would be better known through research, thereby allowing for more satisfactory therapy.

Finally, I wish to recommend that the main goal for the new century be how to reduce interference in pregnancy that takes place in the womb and the delivery of the woman. In fact, the slogan would probably revolve around low technology, non-interventions option in obstetrics care. It is, therefore, predicted that by the next century, women will have more confidence in how, where, and by whom they are delivered, and in fact, this, to me, shall be the way forward.

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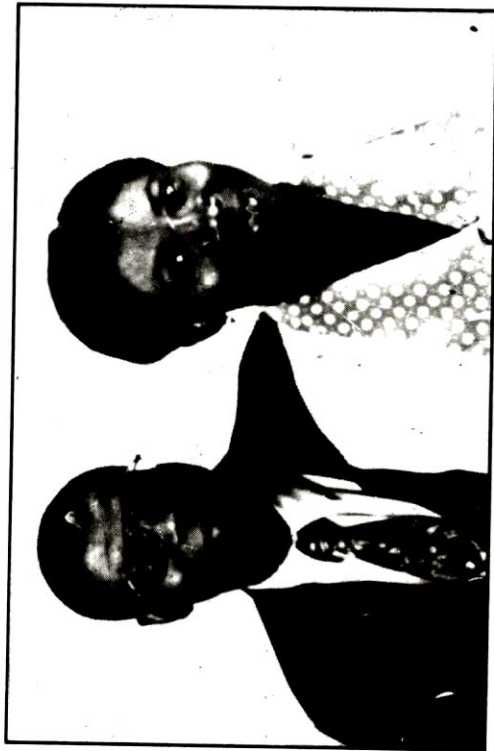
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My Vice-Chancellor, Sir, distinguished ladies and gentlemen, the theme of this presentation "The Womb and the Woman at the Crossroad" has been discussed with these few examples of unpleasant conditions that bring the two to the crossroads and I have attempted to map out the way forward.



**Prof. & Mrs. O. O. Adetoro**

## **ACKNOWLEDGMENT**

Mr Vice-Chancellor, Sir, what is left for me now as I conclude this lecture is to thank God Almighty who has made this lecture possible. In His infinite wisdom, He chose that this lecture should be delivered six years after my appointment as a Professor in Ogun State University and on the 15th year anniversary of my appointment as an academic in Obstetrics and Gynaecology.

I must thank my father, Pa Salami Adetoro and my mother, Raliatu Abebi Adetoro. To my father, I thank him for his vision in permitting me to pursue my academic interest and for constantly being there for me. To my mother, she has been a continual source of wisdom and good counsel over the years. May the Almighty God continue to shine His light brightly upon them.

Please, let me quickly acknowledge with gratitude my teachers who made an early impression on me in the Secondary School, i.e. Offa Grammar School, Offa, Kwara State of Nigeria. These include the Principal, Late Mr. J. Osanyin, Mr Nasiru, Mr. Marshall and Mr. Osanyintolu. I also wish to thank the Old Boys and Girls of Offa Grammar School for their kind support.

Also, I owe a lot of gratitude to my teachers in the University amongst whom are Professor T. Adesanya Ige Grillo, Emeritus Professor of Comparative Anatomy, Professor Lateef Salako NMA NAS, an academic giant and colossus, Professor Olumbe Bassir, Emeritus Professor of Biochemistry. Others include Professors O. A Ojo, V. E. Aimakhu, O. Ogunbode, J.A. Adeleye, B. Adelusi, E. O. Akande, P. Ibeziako, Max Elstein and Eric Chantler of the University of Manchester Medical School, U.K. They all pioneered excellence in the field of Medical Education and in the sub-specialty of obstetrics and gynaecology. They were the first academicians to fire my enthusiasm in research on women in reproductive health. I am grateful for the positive and crucial roles they have played in my career.

in Tennyson's work: "I am a part of all that I have met. My term as helmsman like our voyage has been short and I have no claim to fame." I have tried to remain my own sounding board and placed before you rubbings of my experience over 15 years as an academic obstetrician and gynaecologist serving concurrently within the precincts of the universities and teaching hospitals.

Finally, most of all the tribute is due to my darling wife, who for circumstances beyond our control could not be here today. She is Mrs. Oladunni Bernice Adetoro (nee Ibronke) as well as to our children, Olufunmilayo, Adedoyin, Adeniyi, Taiwo, and Kehinde. They have put up with a major disruption of family life while I toil day and night in the course of academic pursuit. My wife is a source of encouragement and she is very supportive even when it has meant taking risks and sacrificing time together. Her real sense of belonging and mutual commitment to a God-supported family is unparalleled. Please, let me thank her, again, because she taught me so much about God's compassion and a Christian response. Her energetic pursuit of the work of God, her advice, encouragement, and great support to our family have remained a wonderful source of inspiration. Furthermore, her dynamism, industry, and devotion have been my pillar of support and a catalyst to my achievements and success. I thank her for her understanding, endurance, and care. In Proverbs 3:1-10, it is written, 'A wife of noble character who can find her. She is worth more than rubies.'

Mr. Vice-Chancellor, Sir, Deputy Vice-Chancellor, Registrar, Provosts, Deans, distinguished guests, ladies and gentlemen, it is my wish that you will all find God's favours. He will support, shelter, strengthen, and shield you all. He will show His love and cast His eyes of mercy and kindness on you. He will dwell with you and all your families all the days of your lives. I pray that the inspiration received by the man of God on Nigeria which is that the Eagle will fly again shall come to pass in your time.

I thank you all for your presence and attention; and may the Almighty God bless you all.

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