## Prevelance Of Abortion In Southern Tertiary Hospital Of Nigeria From January 2005- December, 2012.

Martin Nnoli<sup>1</sup>, Godwin Ebughe<sup>1</sup>, Collins Nwabuko<sup>1</sup>, Thomas .U. Agan<sup>2</sup>

University of Calabar Teaching Hospital, Dept of Anatomic & Forensic Medicine, Calabar.<sup>4</sup> Federal Medical Centre, Dept of Haemato-Pathology,Abia<sup>1</sup> University of Calabar Teaching Hospital, Dept of Obstetrics & Gynecology,Calabar.<sup>2</sup>

*Aim & Objective:* This is to assess the level of abortion in a tertiary hospital over a period of time with emphasis in the prevailing age of occurrence/months and maternal mortality and morbidity outcome.

*Materials & Methods:* A cross sectional study of 123 samples of all proceeds from the abortion (evacuation from the uterus) sent over the period were analyzed as results were obtained in the record of the department. All results were analyzed using SPSS version 16. These were displayed as per year of study and emphasis on actual age vulnerable with the highest months of occurrence.

**Results**: The study showed the vulnerable age that is usually in search of abortion to be 30-40 years; closely followed by 20-30 years age group.

*Conclusion*: It showed that despite the illegality attached to the procedure some clients still seek the attention from various ways resulting to the high morbidity and mortality seen in our study. *Keywords:* Abortion, histology, infertility, death

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#### Introduction

I.

Abortion occurs when there is termination of pregnancy by expulsion or removal from uterus of a fetus or embryo prior to viability.<sup>1</sup> This can occur spontaneously as is referred to as miscarriage or purposely termed induced. In developed nation, this is among the safest procedures in medicine.<sup>1</sup> The unsafe abortion results to about 70,000 maternal deaths and in some cases 5 million hospitalization each year globally.<sup>2</sup> Over 44 million abortions are done each year with slightly half done under unsafe situations.<sup>3</sup> The incidence in some places have stabilized,<sup>3</sup> due to access to contraceptive services and family planning education.<sup>4</sup> Is on record that about 40% of women all over the world have access to induced abortions ( within gestational limits).<sup>5</sup>

Medical induced abortion however, came 1<sup>st</sup> in early 1990s as this procedure has become popular, legitimate alternative to other methods especially surgically induced in so many other centres.<sup>6</sup> The risk associated with surgical curettage makes the medical abortion more interested option; more so in situation the uterus is second, malformed, or myomatous.<sup>6</sup> The medical induction is the preferred mode but it can only be performed up to 9 weeks of gestation; beyond which the risk of failure is expected.<sup>7</sup> However, the outcome is greatly influenced by increased parity, gestational age, previous abortions and advanced maternal age.<sup>8,9</sup> Moreover, evaluation of effects of medical abortion is difficult owing to absence of both clear standards of failure and follow up examination with clinical trials.<sup>10</sup>

Other factors could contribute to abortion are genetic factors which may contribute to development of aberrant pro-inflammatory immune response during pregnancy thus raising the risk of gestational related pathologies as recurrent spontaneous abortion (RSA). Interleukin 1 receptor antagonist is important anti-inflammatory molecule encoded by IL1RN gene; in which intronic polymorphism has been noted.<sup>11</sup> However, mifepristone treatment has been shown to modulate inflammatory reaction in cervix and at utero-placental interface which could cause adhesion of products of conception resulting to increasing risk of technical difficulties and complications at surgical abortion.<sup>12,13</sup> Also benign uterine pathologies as mullerian anomalies, endometrial polyps, submucous myomas and synechias all could cause miscarriages. Uterine abnormalities as congenital (mullerian anomalies) and acquired (submucous myomas, endometrial polyps and uterine synechias) all contributes to miscarriages- abortions. Uterine septum is the most congenital anomaly of the female tract, with an increase of 2-3% in most population. The spontaneous abortion rate is often high averaging about 65% of pregnancies in some studies.<sup>14</sup> In all cases could result to septic abortion with associated infections complicated by fever, endometritis and parametritis. This is a serious problem to health throughout the world; as morbidity and mortality is greater in nation where it is legalized but much in developing nations as it is illegally unavailably.<sup>15</sup>

Finally, hysterectomy could be a gold standard for evaluation of the endometrial cavity as it helps in visualization of the endometrium. This could help to detect all abnormalities of the uterus and treatment effected

hysteroscopically leading to improved pregnancy outcomes.<sup>16</sup> Our aim is to assess the number of abortions offered with the prevailing age range involved and consequences if any with respect to morbidity and mortality; plus the months/year of study where the frequency is much noticed.

#### II. Materials And Method

A sectional study of all abortion samples evacuated medically or surgically and submitted to our dept was evaluated within the study period of January 2005-December 2012. The results obtained per year were analyzed using SPSS version 16. They data obtained were presented as bar chat, pie-chat and each prevailing months was shown.

# III. Results Prevalence of Abortion in Southern Tertiary Hospital of Nigeria from 2005-2012. Age Valid Percent Valid 20 - 30 years 4 40.0 40.0 40.0

		Frequency	Percent	Valid Percent	Percent
Valid	20 - 30 years	4	40.0	40.0	40.0
	30 - 40 years	5	50.0	50.0	90.0
	40 - 50 years	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2005







		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	2	20.0	28.6	28.6
	April	1	10.0	14.3	42.9
	August	2	20.0	28.6	71.4
	October	1	10.0	14.3	85.7
	Novemeber	1	10.0	14.3	100.0
	Total	7	70.0	100.0	
Missing	System	3	30.0		
Total		10	100.0		

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2005



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2005



Age							
	-	Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	Under 20 years	2	20.0	22.2	22.2		
	20 - 30 years	3	30.0	33.3	55.6		
	30 - 40 years	4	40.0	44.4	100.0		
	Total	9	90.0	100.0			
Missing	System	1	10.0				
Total		10	100.0				



### Prevalence of Abortion in South Tertiary hospital in Nigeria in 2006





		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	2	20.0	22.2	22.2
	February	2	20.0	22.2	44.4
	April	1	10.0	11.1	55.6
	June	1	10.0	11.1	66.7
	July	1	10.0	11.1	77.8
	Novemeber	1	10.0	11.1	88.9
	December	1	10.0	11.1	100.0
	Total	9	90.0	100.0	
Missing	System	1	10.0		
Total		10	100.0		







2007

AGE								
	_	Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	Under 20 years	1	14.3	14.3	14.3			
	20 - 30 years	3	42.9	42.9	57.1			
	30 - 40 years	3	42.9	42.9	100.0			
	Total	7	100.0	100.0				

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2007





Month								
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	January	1	14.3	14.3	14.3			
	March	1	14.3	14.3	28.6			
	May	3	42.9	42.9	71.4			
	August	1	14.3	14.3	85.7			
	December	1	14.3	14.3	100.0			
	Total	7	100.0	100.0				

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2007



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2007



	Age							
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	20 - 30 years	7	53.8	53.8	53.8			
	30 - 40 years	5	38.5	38.5	92.3			
	40 - 50 years	1	7.7	7.7	100.0			
	Total	13	100.0	100.0				

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2008



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2008



	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	1	7.7	7.7	7.7
	February	1	7.7	7.7	15.4
	April	1	7.7	7.7	23.1
	May	3	23.1	23.1	46.2
	June	2	15.4	15.4	61.5
	July	2	15.4	15.4	76.9
	August	1	7.7	7.7	84.6
	October	2	15.4	15.4	100.0
	Total	13	100.0	100.0	

Month



#### Prevalence of Abortion in South Tertiary hospital in Nigeria in 2008





#### Prevalence of Abortion in South Tertiary hospital in Nigeria in 2009





Month								
	-	Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	January	1	6.2	6.2	6.2			
	March	1	6.2	6.2	12.5			
	May	2	12.5	12.5	25.0			
	June	2	12.5	12.5	37.5			
	July	1	6.2	6.2	43.8			
	August	1	6.2	6.2	50.0			
	September	4	25.0	25.0	75.0			
	October	2	12.5	12.5	87.5			
	November	1	6.2	6.2	93.8			
	December	1	6.2	6.2	100.0			
	Total	16	100.0	100.0				

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2009



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2009



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	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 30 years	4	22.2	22.2	22.2
	30 - 40 years	7	38.9	38.9	61.1
	40 - 50 years	7	38.9	38.9	100.0
	Total	18	100.0	100.0	

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2010



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2010



_	_	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	2	11.1	20.0	20.0
	February	1	5.6	10.0	30.0
	June	1	5.6	10.0	40.0
	August	4	22.2	40.0	80.0
	December	2	11.1	20.0	100.0
	Total	10	55.6	100.0	
Missing	System	8	44.4		
Total		18	100.0		



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2010

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2010



Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 20 years	1	3.3	9.1	9.1
	20 - 30 years	7	23.3	63.6	72.7
	30 - 40 years	3	10.0	27.3	100.0
	Total	11	36.7	100.0	
Missing	System	19	63.3		
Total		30	100.0		

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2011





Prevalence of Abortion in South Tertiary hospital in Nigeria in 2011

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2011





	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	1	3.3	10.0	10.0
	February	2	6.7	20.0	30.0
	March	1	3.3	10.0	40.0
	May	2	6.7	20.0	60.0
	June	1	3.3	10.0	70.0
	November	2	6.7	20.0	90.0
	December	1	3.3	10.0	100.0
	Total	10	33.3	100.0	
Missing	System	20	66.7		
Total		30	100.0		

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2011



			Age		
	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 20 years	2	10.5	10.5	10.5
	20 - 30 years	7	36.8	36.8	47.4
	30 - 40 years	8	42.1	42.1	89.5
	40 - 50 years	2	10.5	10.5	100.0
	Total	19	100.0	100.0	

Prevalence of Abortion in South Tertiary hospital in Nigeria in 2012



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2012



Month
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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	February	3	15.8	17.6	17.6
	March	3	15.8	17.6	35.3
	May	2	10.5	11.8	47.1
	July	1	5.3	5.9	52.9
	August	4	21.1	23.5	76.5
	September	1	5.3	5.9	82.4
	November	1	5.3	5.9	88.2
	December	2	10.5	11.8	100.0
	Total	17	89.5	100.0	
Missing	System	2	10.5		
Total		19	100.0		



Prevalence of Abortion in South Tertiary hospital in Nigeria in 2012





The results from the data /graphical representation showed that age range of 30-40 years occurred in four places of the year under study; with age range of 20-30 years in only two places. Is remarkable to note that at 2007 and 2010 these two age ranges appeared to have same frequencies of 42.9% and 38.9% in the respective years of study.

When we consider the most prevailing months we found that the months of January and February seemed to be the worst time when demand for abortion procedures are done.

#### IV. Limitation Of Our Study

Is the fact is not legalized in Nigeria as the women who seek for the procedure are often embedded with a lot of secrecy hence resulting to a lot of criminal abortions by unqualified personnel and its consequences of morbidity and mortality. There is no obvious follow up as most things are secretly associated for fear of the law enforcement.

Also the age difference of these women could not be only those seen; as we believe there are teenagers who were not captured since they are often afraid to seek attention in purported established places. There is no gestational age of the pregnancy prior to the abortion as should be expected in our records.

#### V. Discussion

Since abortion is not legalized in Nigeria, it thus brings forth a lot of quackery (criminality) abortion on daily basis resulting to a lot of mortality and morbidity. This is also seen in latin America, Africa and Uruguay where induced abortions are clandestine –abortions here has been a crime since 1938.<sup>17</sup> In as much as abortion is not penalized in extenuating circumstances ( preventing women's death/serious morbidity, extreme poverty, extra or premarital pregnancy or pregnancy from result of rape) only exceptional are abortions carried out in the public hospitals.<sup>17</sup> Hence, maternal deaths due to unsafe abortion could be reduced by making all abortions safe.

In our study, we noted that the age range of 30-40 years were the more prominent seen in the number of abortions; closely followed by 20-30 years age range. The later is also seen to be the highest in study of Brizzo L et al at Uruguay where it accounted for 90.3% of the study group. The former 30-40 years was seen to be highest in study of Ebru cogendez et  $al^{18}$  are the more class seeking abortion. The age range of less than 20 years were not seen in our record as we believe such must have gone through illegal procedure by unqualified personnel with its consequencies.

During the study we observed variations of months/year. In the whole study, we noted that at January and February there seems to have a high frequencies of demand for abortions ranging from 11.1-20%. It is possible for us to deduce in this context that is most likely due to due to cosmopolitan nation of Nigeria- with diverse religion practices. Since this area of study is a christains dominant religion and being a long holidays period Christmas/new year for all and sundry it becomes imperative for the college/workers to get rid of the pregnancies as they are returning to their primary duty posts.

Also we noted that in 2007, 2010 the both prominent age ranges in our study appeared to have same frequencies of occurrence- 42.9% and 38.95 respectively. That is at this study year both age ranges of 20-30 years and 30 -40 years are at their optimal level in seeking for abortion.

In as much as no record of morbidity were seen it becomes imperative to reduce risk by providing scientifically based information on the risks associated with different mains to induce abortions where absolutely necessary. This is done to reduce use of dangerous mains as introduction of sharp objects, unsterilized instruments into the pregnant uterus or use of toxic infusions etc. Also the obstetricians gynecologists, other medical specialists, midwives and other health providers should play a greater role in ensuing effective scientific evidence to policy makers and health authorities as to minimise criminality which always leads to increase mortality and morbidity.

#### VI. Conclusion

We found that the most prevailing age range of 30-40 years; followed by 20-30 years were the most vulnerable boldly seeking for the procedure. These does not rule out the fact that age range < 20 years are not involve though is unavaoidable absence in our record.

However, the long holidays with a lot of festive activities for all ages-young and old must have warranted to many unwanted pregnancies hence at verge of end of the holidays many are out seeking for places to abort. The university and others unmarried are all bent for performing the abortion as o return to school as single women and not as a gravid.

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