

# SOCIAL DETERMINANTS OF HEALTH AND MATERNAL MORTALITY DUE TO UNSAFE ABORTION IN NIGERIA: A REVIEW

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## ABSTRACT

### Background:

*Unsafe abortion is a means of terminating an unwanted pregnancy and it is carried out by individuals who do not possess the requisite skills or it occurs in an environment that is not up to standard or both. Complications occur as a result of unsafe abortion which can sometimes lead to death.*

### Methods:

*The study design is a descriptive narrative review of existing literature with a search through Cochrane Library, Google Scholar and Cochrane databases using keywords like unsafe abortion, maternal mortality, social determinants of health, unwanted pregnancy in Nigeria. Articles within 10 years of publication were selected.*

### Results:

*A variety of articles were found covering unsafe abortion and the Dahlgren and Whitehead model was used to show the relationship between the social determinants of health and maternal death due to unsafe abortion in Nigeria.*

### Conclusion:

*Some Nigerian communities have harmful cultural practices which aid unsafe abortion and this is a call for action by the Ministry of Health. The Ministry of Health should advocate and make policies to strengthen healthcare at all levels including provision of postabortion care and raising awareness on gender issues related to health.*

### Keywords:

*Unsafe abortion, maternal mortality, social determinants of health, unwanted pregnancy, Nigeria*

## INTRODUCTION

Abortion occurs if a woman of reproductive age, loses her pregnancy before it becomes viable.<sup>1</sup> It can be spontaneous occurring mostly in the first trimester or induced which is practiced by a variety of individuals, the world over.<sup>1</sup> Some women with unwanted pregnancies end up having an unsafe abortion and the

attendant complications occurring as a result of it include sepsis, haemorrhage, hypovolemic shock, reduced fertility, problems with the reproductive tract and death.<sup>2</sup>

The World Health Organisation (WHO) defines maternal mortality and unsafe abortion as seen in Table 1.

Table 1:” WHO definitions of maternal mortality and unsafe abortion”<sup>3,4</sup>

“Maternal mortality is the death of a pregnant woman within a timeline of 42 days after her pregnancy was terminated, not considering how long she has been pregnant or the position of the pregnancy, from any factor associated with the pregnancy or made worse by it or how it was managed but not due to disaster or mere events” <sup>3</sup> .
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“Unsafe abortion is a method of getting rid of an unwanted pregnancy done by individuals who lack the proper skills or in a place that does not meet the required medical standards or both” <sup>4</sup> .
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About 80 million pregnancies are unwanted, out of close to 200 million pregnancies that take place on a global scale.<sup>2</sup> According to WHO Estimates, the number of induced abortions performed annually around the world is about 46 million.<sup>2</sup> For every 1,000 women of reproductive age around the world, it is estimated that at least 35 of them would have had an induced abortion, 20 of them done legally and the remaining illegally.<sup>2</sup> Globally, about 20 million unsafe abortions are done annually, mostly in developing nations and close to 80,000 deaths occur.<sup>2</sup> Every day, there are about 55,000 cases of unsafe abortion globally and 200 maternal deaths according to WHO.<sup>2</sup>

Nigeria, among other developing countries has unsafe abortion and maternal mortality as serious public health issues.<sup>5</sup> About 760,000 abortions are performed annually in Nigeria, 60% of these are done by non-physicians whilst

the private health facilities perform about 87%.<sup>2</sup> There is a general belief that out of every 10 Nigerians, at least 1 would have had an induced abortion.<sup>2</sup> About 20,000 Nigerian women die yearly as a result of complications due to unsafe abortion but only a handful of women can access abortion care services in Nigeria because it is illegal to terminate pregnancy.<sup>1</sup> Permission can only be given to terminate pregnancy if a woman’s life needs to be saved and for preservation of her mental and physical health.<sup>1</sup>

The estimate of maternal deaths due to abortion across 4 different centres according to different studies in the country range from 12% in the North,<sup>6</sup> 17% in the South,<sup>7</sup> 30 % in the West<sup>8</sup> and 34 % in the East,<sup>9</sup> although an estimate of over 1 million cases of induced abortion took place in Nigeria in 2012 according to a study done by Bankole et al.<sup>10</sup> Complications of unsafe induced abortions makes up a high

proportion of gynaecological admissions to hospitals.<sup>11</sup>

For Socio-economic conditions, "the burden of the complications of unsafe abortion is enormous both to the health system and the society particularly in respect of the economic and social considerations."<sup>2</sup> There is enormous cost to the society as a result of unsafe abortion, for example the government spends about \$114 and \$130 in Africa and Latin America respectively just to care for those who are ill and have disability with unsafe abortion.<sup>9</sup> The risks associated with abortions for some young ladies goes beyond the fears resulting from unwanted pregnancy, fears of disapproval from parents, jilting by a boyfriend or disowning by parents, emotional and financial burden of childbirth, dismissal from school or inability to get married as a result of having a child out of wedlock.<sup>7</sup>

For Healthcare services, scarce healthcare resources are also stretched by those who stay long in hospital as a result of complications due to unsafe abortion.<sup>12</sup> Expenditure from unsafe abortion can tilt a family into penury and does not only lead to loss of productivity in the event of death, but affects the state of health of the

children, their education, overall welfare and the woman's output to the community.<sup>13</sup> This is because over 8 million disability-adjusted life years (DALY's) are lost as a consequence of unsafe abortion due to a woman's illness and death.<sup>13</sup> This is in addition to the fact that unsafe abortion is among the top 5 causes of maternal death, alongside haemorrhage, infection, obstructed labour and hypertensive diseases.<sup>14</sup> Over 1.7 million women come down with secondary infertility as a result of unsafe abortion and close to 3 million women go through the effects of reproductive tract infections according to WHO Estimates.<sup>15</sup>

Awareness of legal restrictions is important because some root causes of unsafe abortion stems from the inability of the woman to procure legal abortion services (which are safe) and pregnancy that was not planned.<sup>4</sup> Abortion is prohibited by law in Nigeria with penalties to follow.<sup>2</sup> There are two codes viz the penal code which is used in the northern states and the criminal code which is used in the southern states.<sup>10</sup> As a result of these laws, whoever performed the abortion or aided the process by way of supplying the equipment can all be jailed as seen in Table 2.<sup>2</sup>

**Table 2 "Criminal code penalties related to abortion."<sup>2</sup>**

Section	Pregnancy	Penalty
228	Termination of pregnancy	Felony. By 14-year jail
229	Submission of a woman to termination of her pregnancy	Felony, by 7-year jail
230	Supply of instrumental substances by any individual"	Felony, by 3-year jail

**Table 3: "Reasons to grant permission for abortion in Nigeria according to the Law"<sup>5</sup>**

“Permission to do abortion legally in Nigeria can only be granted for reasons like saving a woman’s life, but not for personal, social, economic purposes, on request, due to rape or if the unborn child is said to be impaired”

“If there is an urgent need to save a woman’s life in a government hospital, then abortion can be induced, after certification by two physicians”

“ Reasons to grant permission for abortion in Nigeria ” according to the law are shown above in table 3.<sup>5</sup> These laws have made Nigerian women resort to secret ways of getting rid of their unwanted pregnancy with a possibility of it being unsafe and risky.<sup>1</sup> Most of the maternal deaths due to unsafe abortion which are done in secret are not reported because of unwillingness of her family to tell the authorities the actual cause of death in a place with restrictive abortion laws.<sup>13</sup>

“The challenges of unsafe abortion and its complications are worldwide and invariably involve several stakeholders cutting across professionals, cultural and even religious leanings.”<sup>2</sup>

Dahlgren and Whitehead model is used as a framework to help point out the line-up of social determinants of health affected by maternal death due to unsafe abortion<sup>15</sup>.

This study was aimed at reviewing unsafe abortion in Nigeria with emphasis on the prevailing social determinants of health and maternal deaths among Nigerian women. It was also aimed at proffering ways to tackle these determinants.

## METHODS

The study design is a descriptive narrative review of existing literature. Three databases(PubMed Library, Cochrane databases and Google scholar) were searched using search terms highlighted in Table 4.

**Table 4: Keywords used.**

My Keywords were maternal death or maternal mortality or unsafe abortion or unwanted pregnancy in Nigeria and or the following:

### General socio-economic conditions

Poverty

Culture

Gender

Environment

Agriculture

Food production

- Education
- Work environment
- Unemployment
- Water and sanitation
- Healthcare services
- Housing
- Social and community networks
- Individual lifestyle factors
- Age
- Sex
- Constitutional factors

The Dahlgren and Whitehead model<sup>15</sup> as shown in Figure 1 will be used to show the relationship between the social determinants of health and maternal death due to unsafe abortion in Nigeria.

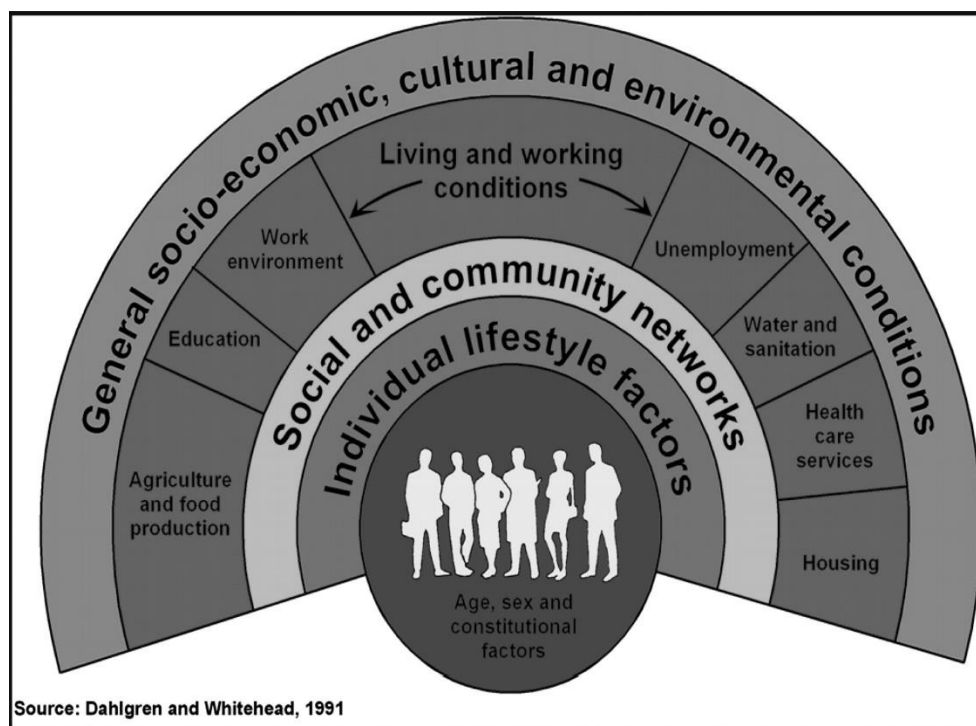


Figure 1: Dahlgren and whitehead model.<sup>15</sup>

My inclusion criteria was selection of publications not more than 10 years old and also articles in English that were relevant for this paper. I looked up the citations of articles and altogether found 26 articles useful for this paper.

## RESULTS

A variety of articles were found covering unsafe abortion and the Dahlgren and Whitehead model will be used to show the relationship between the social determinants of health and maternal death due to unsafe abortion in Nigeria. Some of the determinants are associated with others.

## GENERAL SOCIO-ECONOMIC, CULTURAL AND ENVIRONMENTAL CONDITIONS

There is a lot of poverty in Nigeria despite being endowed with resources to the point that they are rated as one of the twenty countries deemed to be poor<sup>14</sup>. Unplanned pregnancy can be due to poverty and low socio-economic state<sup>5</sup> as shown in Table 3 which shows the consequences of poverty and inequality for young women as noted at the International Conference on Population and Development (ICPD) held in Cairo in 1994.<sup>16</sup>

**Table 5 “Consequences of Poverty and Inequality.”<sup>16</sup>**

Coerced unprotected Sex
Early Marriage
Teenage pregnancy
Lack of access to contraception
Unwanted pregnancy
Unsafe abortion
HIV/AIDS and other sexually transmitted infections

Socio-economic consequences for early unplanned pregnancy in a young person include termination of education, reduced job prospects, issues with self-esteem and shattered relationships.<sup>17</sup> Abortion services in countries with restrictive abortion laws rendered by skilled personnel are too expensive for women of low socio-economic class.<sup>5</sup> They therefore seek

treatment from unskilled providers, but still find it difficult to go to a public hospital when complications arise because of the belief that they cannot afford the price of treatment in such facilities.<sup>5</sup> They eventually present to a hospital when their condition would have deteriorated with depleted funds and cannot meet up with the basic requirements needed for emergency

care.<sup>18</sup> But the opposite occurs for women who have money, who look for a skilled doctor in a private setting and secure a safe abortion.<sup>19</sup>

## **CULTURE**

Some cultures in Nigeria, regard early child bearing as a good thing for a young girl and this encourages unsafe sex which leads to unwanted pregnancy.<sup>17</sup> Some of these young girls who do not desire to have a child that early seek for an abortion in the hands of a skilled personnel but those of them who cannot pay for abortion services in a hospital or who do not live close to one, go to unskilled providers like traditional healers.<sup>20</sup> These untrained personnel use methods like drugs, concoctions or even insert metal objects into a woman's uterus in a bid to terminate the pregnancy.<sup>20</sup> They add chemical potash to lime, aspirin and water, just to aid the termination process.<sup>20</sup> And when complications develop, these women find it difficult to present to a public health facility because of cultural stigma from the environment where they reside, thereby denying themselves of post-abortion care.<sup>5</sup> This is because abortion is an abomination according to their culture and religion, but practiced because unwanted pregnancy is still disapproved.<sup>21</sup>

## **LIVING AND WORKING CONDITIONS**

### **EDUCATION**

The younger and more educated women may get rid of their unwanted pregnancy so as to complete their education or get some work experience but the older and less educated ones procure an abortion because they have completed their family size.<sup>22</sup> In a study that was done across 5 countries, the number of cases of abortion seen in women who had attended secondary school, even if it was for a year or so was 61% for Nigeria while that of Gabon was

82%.<sup>23</sup> In a study done in the South-eastern part of the country, 64% of the respondents were known to have attended secondary school and the bulk of them constituted the abortion seekers below 24 years of age.<sup>24</sup>

There is evidence to show that there is access to safe abortion for the educated women despite the issue of the legality of abortion while the less educated and poor women end up having illegal and unsafe abortion.<sup>7</sup> Among some undergraduates, the goal of finishing their studies was the main reason for termination of pregnancy.<sup>25</sup> Also, problems with accessibility to good healthcare services can make some educated women not to get the needed care.<sup>14</sup> Single status, low education and late presentation with serious complications are associated with mortality.<sup>1</sup>

## **UNEMPLOYMENT**

Some unemployed women in Nigeria involved in small businesses have multiple sex partners in order to meet up their financial needs and end up with unwanted pregnancy.<sup>24</sup> Those unemployed women with no formal education who are in serious financial difficulty are not likely to go for a safe abortion, but rather patronise the unskilled personnel thereby contributing to the burden of maternal mortality and morbidity in the country.<sup>24</sup> In a 4-year review of complicated unsafe abortion cases done in a hospital in Nigeria, as much as 60% of the abortion cases were among unemployed women.<sup>12</sup> The loss of jobs by parents sometimes forces the young daughters into early initiation of sex because they need to cater for themselves and this results in unwanted pregnancy.<sup>17</sup>

## **HEALTHCARE SERVICES**

In Nigeria, lack of contraceptive use has been attributed as a cause of unwanted

pregnancy amongst others.<sup>5</sup> Poor access to healthcare, poverty, coupled with socio-cultural stigma are barriers to contraceptive usage in single women and this leads to unsafe abortion.<sup>12</sup> Even contraceptive failure and inadequate knowledge of sex are contributory.<sup>5</sup> Also some females are not even aware of any contraceptive method, yet they are sexually active.<sup>25</sup> These patients who have had an unsafe abortion sometimes present to a hospital as a last resort in a critical state, probably due to the infection caused by the unsterilized instruments used and unhygienic conditions they were subjected to.<sup>12</sup>

The risk of complications and even dying from unsafe abortion is dependent on the skill of the health service provider, the equipment used and the environment in which the abortion was done.<sup>26</sup> Estimates of post-abortion care in hospitals for women in Nigeria by the WHO showed that it will cost about \$132 per individual.<sup>11</sup> The health system will bear \$37 of the amount while the patient pays the rest and this drains the health system.<sup>11</sup> Also sepsis was the most common cause of death, even though there were other complications like haemorrhage and retained products of conception.<sup>11</sup> The impact on globalisation include the cost of providing post-abortion care with loss of productivity and impoverishment of affected families and their communities.<sup>13</sup>

## **SOCIAL AND COMMUNITY NETWORKS**

Some young women engage in sexual acts due to peer pressure from friends in their environment, society's acceptance of premarital sex, appeal from their partners not to use a method of contraception and they end up with an unwanted pregnancy.<sup>17</sup> Their peer group convinces them that the use of contraception will give rise to future fertility issues, thereby

preventing them from having safe sex which results in unwanted pregnancy.<sup>12</sup> Some of these young girls try to terminate the pregnancy on their own through methods learnt from their friends, with variable outcomes.<sup>5</sup>

Women who desire to terminate their pregnancies in Nigeria go to a private health facility, a maternity run by a nurse or chemists and some present to a government facility (as a case of complicated abortion).<sup>20</sup> Yet a few others who due to either poor access to healthcare service, poverty or both, go to an unskilled or traditional provider alone or in the company of a trusted friend.<sup>20</sup> Crude ways like use of hangers, herbs, strong liquors, bicycle spoke, wire are employed to induce abortion with consequences.<sup>5</sup> These women look desperate when they allow these providers use such crude measures on them.<sup>5</sup> And the identity of these abortionists is not disclosed and this encourages them to recruit more hands and their activities continue unabated.<sup>12</sup>

Most women who were managed for abortion have had a previous termination of pregnancy,<sup>25</sup> and still patronise the same inexperienced health service provider afterwards which puts them at a higher risk of possible morbidity and mortality.<sup>22</sup> Also social stigmatisation is top on the list of the reasons why women procure abortion in Nigeria.<sup>5</sup> The stigma for unmarried girls who get pregnant out of wedlock is high and they seek for induced abortion because they do not want their education to be disrupted.<sup>9</sup> Stigma shows up in many ways including the treatment meted out to women by their families, community and healthcare providers.<sup>13</sup>

## **INDIVIDUAL LIFESTYLE FACTORS**



Young girls in Nigeria, with little or no know knowledge of contraceptive facing pressure from older men and financial constraints due to poverty, go into the habit of having unsafe sex in exchange for money.<sup>17</sup>

## **AGE, SEX AND CONSTITUTIONAL FACTORS**

### **AGE**

As teenagers transit to adolescence, they are faced with challenges which they are not prepared for, most especially those bothering on their sexuality.<sup>17</sup> Lack of sex education with hormonal increase and reduced parental influence due to economic hardship coupled with a desire to be like their peers, pushes them into early unsafe sex, with consequences of unwanted pregnancy and sexually transmitted infections.<sup>17</sup> Disapproval from parents, school interruption, uncertainty of marriage in future should they carry on with the pregnancy are among the reasons why these adolescents seek for an abortion, which is difficult for them because of the cultural barriers.<sup>12</sup>

According to a study involving Nigeria and several nations, a third of abortions which take place in Nigeria are among adolescents.<sup>22</sup> 18-20 years is the stage of sexual activity,<sup>21</sup> which coincides with the age that secondary school students procure abortion (less than 20 years).<sup>7</sup> Also, induced abortion is seen in both single and married women.<sup>12</sup> The reason married women give for it is child spacing.<sup>24</sup> But economic stability and support from their husbands makes it likely for them to get a safe abortion.<sup>1</sup>

### **SEX**

In Nigeria, financial constraints pushes some students into having indiscriminate sex

which can lead to unplanned pregnancy.<sup>24</sup> Young men go about having indiscriminate unsafe sex and their partners end up with unwanted pregnancies because the society supports early initiation of sex for males but frowns at it for females.<sup>17</sup> Also street hawking especially at night by young girls in Nigeria due to poverty, predisposes them to sexual exploitation in form of coercion and rape, leading to unwanted pregnancy.<sup>17</sup> This is because the Nigerian society is male-dominated and there is always the tendency for a few people to suppress the voice of a female.<sup>17</sup> These stories of sexual exploitation are hardly reported because of cultural stigma and this leads to unsafe abortion.<sup>17</sup>

## **DISCUSSION**

Analysing how maternal deaths from unsafe abortion in Nigeria is affected by the social determinants of health and suggesting ways in which the Ministry of Health can tackle some of the determinants can serve as a healthcare policy advice. The social determinants that are most important because of their impact are culture, education, healthcare services, sex and community and social networks.

The abortion laws in Nigeria are due for a review. There were a few attempts some years ago to review these laws via legislation but it was not successful.<sup>2</sup> Some women who can afford to pay for a safe abortion do it as a day procedure and are allowed to go home after a few hours in private settings. It is as though the government is aware of this, but turns a blind eye maybe because it will take a lot to go through the legislative process of reviewing a bill on the existing laws on abortion before it is passed and Presidential assent is given. It seems like the law on abortion is only on paper and no

one gets prosecuted for flouting it. The government has to take a second look at these laws and see how it can be reviewed with special consideration for those with unwanted pregnancy as a result of incest, rape and other conditions that threaten the life of a mother for a start.<sup>2</sup>

Laws should be enacted by the government with strict penalties to prevent quacks from performing an abortion.<sup>18</sup> This will make these quacks know that the government is serious about tackling the situation and this will help reduce their activities to the barest minimum.

The government has to launch a campaign against certain age-long cultures encouraging early pregnancy in some communities. The culture of individuals plays a role in their lives and people are shaped by how they were raised and under what circumstance. In some Nigerian communities, early pregnancy is seen as an achievement and this encourages unsafe sex, while in others, there is so much stigma associated with unwanted pregnancy which leads to unsafe abortion. For fear of segregation from the community, abortion is done in secret.

In such communities, there are traditional healers who use unsterilized instruments, drugs, concoctions just to terminate the pregnancy, at an affordable rate, with due consideration to the socio-economic status of their clients. A lot of times there are complications and after it occurs, they go to the same traditional healers who reassures them but they still leave there in a bad clinical state and finally end up in the emergency ward of a government hospital moribund, with the burden of morbidity and mortality on the health system. What is worrisome about this is that the identity of the abortionist is often

concealed which has spun several of their kind in such communities.

There is need to introduce free education up to the level of secondary school, inclusion of sex education in the curriculum and provision of easy access to family planning services as a way to stop this ugly problem of unsafe abortion.<sup>18</sup>

Health insurance is very important. As regards healthcare services, low contraceptive use has contributed to the rise in unwanted pregnancies leading to unsafe abortion. Poor access to healthcare, either due to availability, affordability, accessibility may have all played a role. Even delays in decision to seek care, delays in getting to the health facility and being attended to at the health facility have in one way or the other affected cases of unsafe abortion.

Some of the hospital cases of unsafe abortion are accepted so as to request for money later because of poor or no health coverage especially for those of low socio-economic class and when they are admitted in a critical state, they spend more time in the hospital receiving post-abortion care, with a drain on the health system, thereby preventing others from getting care for other illnesses because they have taken up spaces in the wards. But then, health is a human right. Those women who have money find a way to get a safe abortion maybe in a private clinic, through a friend or some referral and don't go through such unfortunate events. This in itself, is an inequality in healthcare. Health resources are not fairly distributed.

There has to be regular retraining of our medical practitioners on how to manage postabortal complications bearing in mind that our health facilities need to be equipped with all that is needed including the manpower to make them

more efficient.<sup>18</sup> Surgeries should be performed promptly especially emergency cases without insistence on payment before service so as to reduce maternal mortality which usually comes with such delays.<sup>18</sup> This underscores the importance of universal health coverage.

Young boys and girls should not be encouraged to begin early initiation of sex, but rather, they should be educated on sex and advised to wait until they are old enough to make the decision bearing in mind the consequences. Gender inequality should be addressed by the government. Encouraging young boys to start having sex earlier than their female counterparts is wrong. Young girls are coerced for sex or raped while selling at night and helping their impoverished parents, but are expected to say nothing about it even when they get pregnant. These girls probably go to school during the day and the best time for them to sell their wares is at night, yet they are made to suffer for trying to alleviate poverty and support their families. This might be the reason why in desperation, they terminate an unwanted pregnancy at all cost.

Community participation can help to cover the shame of unsafe abortion and this will make the women suffering from complications as a result of it to use the proper health

facilities.<sup>5</sup> Once there is awareness that there is little or no discrimination or stigmatisation for women with unwanted pregnancy, they will start coming to seek for counsel and help.

Most of the studies were not uniform and various studies ranging from prospective to retrospective analysis were done, so bias cannot be eliminated from the findings. Although the conceptual framework used is a good tool for improvement in health policy, there are also others that can be applied.

## CONCLUSION

The Ministry of health should reach out to these Nigerian communities involved in harmful practices which aid unsafe abortion so as to reduce the burden on healthcare services caused as a result of their activities.

The Ministry of health is expected to advocate for late initiation of sex, safe sex, contraceptive use and campaigns against unsafe abortion to reduce the stigma especially among adolescents (and older women too). The policy makers at the Ministry of health should strengthen the health system at all levels including making provision for postabortion care. They should also raise awareness on gender issues related to health.

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