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# The impact of abortion on the reproductive health of women

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#### Abstract

Women have resorted to abortions since times immemorial despite social norms and legal restriction that barred it. Today, restrictive abortion laws and inaccessibility to safe and affordable abortion services lead many girls and women of reproductive age. Specifically, the study sought to examine the background characteristics of the respondents who are nurses, senior nurses, doctors and midwives who have receive patients on abortion cases, the cause of the pregnancy, what actually influence them to abort the pregnancy, the effects it has on their health and the future pregnancy of the women, the health care they received, as well as the long term consequences and finally measures what they think can help curb the problem. Twenty-one (21) medical personnel were used for the study.

Pathways to causes of abortions shows reasons for the abortion and this ranged from incest, rape, ectopic, sex preference, advice from doctors because of complications, peer influence, pressure from parents, husbands or partners did not want a pregnancy at the time of pregnancy or being too young to have a baby, the cost of having to raise a child, having to drop out of school to have the baby as well as to further education and pregnancy resulting from an extra-marital affair in husband's absence were other reasons that accounted for the termination of pregnancies.

However, difficulty in getting pregnant again and possible complications in subsequent pregnancies were some of the long term consequences cited by some respondents. Respondents reported that high proportion of patients received treatments such as surgery, Antibiotics, counseling, Evacuation of the Uterus at the health facility for post abortion care. And some had long term consequences such as excessive bleeding, abdominal pain, menstrual pain, Barrenness and finally patients can loss their life as a result of their deviant act. This is an important finding in and of itself, because it throws more light on the actual causes of abortions and the impact it has on the reproductive health of women.

Keywords: Abortion, Contraceptives, Reproductive Health, Pregnancy

#### Introduction

It appears abortion is most poorly understood, easily misunderstood, easily mixed up and abused subject matter. Etymologically speaking, the term abortion is derived from the Latin infinitive 'aboriri', which means perish, but literally translated as the loss of fetal life. Abortion, in its most common usage, refers to the voluntary or induced termination, generally through the use of surgical procedures or drugs and as a result of that, birth does not take part (Coppens, 1907).

Grimes and Stuart (2010) opines that an abortion is when pregnancy is ended so that it does not result in the birth of a child. Sometimes this is called 'termination of pregnancy'. The pregnancy is removed from the womb, either by taking pills (medical abortion) which involves taking medicines to cause a miscarriage or by surgery (surgical abortion) where the pregnancy is removed from the womb. Most abortions can be provided on a day care basis which means one does not need to stay at a clinic overnight.

Within the framework of World Health Organization (WHO) definition of health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. Reproductive health addresses the reproductive processes, functions and system at all stages of life and therefore reproductive health implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide when and how often to do so.

Women around the world have used abortion to control their reproduction at every point in history, and in every known society regardless of its legality.

In Ghana, it appears 20% of births are by adolescents, with most occurring out of ignorance,

as sexual and reproductive health education is inadequate or often even not available. Sexually Transmitted Infections are common among this age group. Single mothers, especially adolescents, are not targets of family planning clinics and most clinics cater for married women. Until 1985, abortion in Ghana was governed by the Criminal Code of 1960 (Act 29, sections 58-59 and 67). Under that Code anyone causing or attempting to cause an abortion, regardless of whether the woman was pregnant, could be fined and/or imprisoned for up to 10 years. A woman inducing her own abortion or undergoing an illegal abortion subject to the same punishment.

As of 1985, Ghanaian law permits abortion in cases of rape, incest or the "defilement of a female child" if the life or health of the mother is in danger; or if there is risk of fetal abnormality. To ensure that legal abortions are provided safely, the Ghana Health Service and the Ministry of Health established protocols for the provision of safe abortion services. These guidelines, adopted in 2006, outlined the components of comprehensive abortion care and call for expanding the base of health providers to perform first-trimester procedures. According to a 2007 survey of women, there were at least 15 induced abortions for every 1,000 women of reproductive age (15–44). However, since abortion is heavily stigmatized in Ghana, actual incidence of the procedure is very likely underreported in face-to-face interviews (*Ghana Maternal Health Survey 2007*).

While recent, reliable national abortion figures for Ghana are not available, the World Health Organization estimates that there are 28 procedures per 1,000 women each year in Western Africa. The true incidence in Ghana likely approaches this rate.

# The study under review seeks to answer the following questions.

- 1. What are the causes of abortion in women in the Techiman Municipality?
- 2. To what extent does abortion affects the reproductive health of women in Techiman municipality?
- 3. What are some possible measures through which abortion can be reduced in Techiman?

### **Review of Relevant Literature Causes of abortion**

According to a newly conducted study by the Alan Guttmacher Institute, almost all abortions take place because a child would be inconvenient, too expensive, or too difficult to cope with, abortion provider Planned Parenthood's Research Affiliate. In a 2004 survey of 1,209 American women at 11 major abortion clinics, women revealed that neither health problems, rape, incest, nor coercion by family members or partners were the primary or even secondary reasons for seeking an abortion. From the research, 92 % of women said social or other factors were the reason behind their abortion. 7% said physical problems or possible health problems with the baby were the reason, and only 0.5% said they were seeking an abortion because they had been raped. Bad timing was the most common reason women gave for having an abortion. They were not ready to have another child. Not being able to afford a child, or another child was the second most important reason given.

Despite the argument by abortion advocates that health risks are one of the central reasons for seeking an abortion,

the study revealed something strikingly different-that women most often choose abortion because they perceive it to be the easier choice.

Again, women do not make the decision lightly, the authors of the study pointed out, nor are they happy with the decision to abort their child. 'The language women used suggest that abortion was not something they desired', stated Lawrence B. Finer and co-authors. 'They saw not having a child as their best (and sometimes only option.)'.

It is tragic that women facing a difficult or unwanted pregnancy see abortion as their only option. Adoption was rejected by more than one third of 38 women given indepth interviews in the study, who said they had rejected adoption as "morally unconscionable" because "giving one's child away is wrong." How has it become unacceptable to place a child for adoption, but justified to kill that same child? The profound moral confusion caused by legalized abortion is painfully evident in the accounts given by women.

A study in southern Ghana also found that educated and urban women were more likely than their less educated and rural counterparts to seek an abortion, and that Christian women were more likely than Muslim women to seek the procedure (Ahiadeke, 2001).The most common reason given women for seeking an abortion is not having the financial means to take care of a child (21%) (GSS, 2007). Other common reasons include wanting to delay childbearing (13%), continue schooling (11%) and continue working (9%). Six percent of women said their partner did not want the child or denied responsibility for the pregnancy. Health reasons for terminating the pregnancy were cited by about (5%) of women (Ahiadeke, 2001).

# Impact of abortion on the reproductive health of women

The study by researchers from the Guttmacher Institute in New York relied on data from nearly 9,500 American women who had an abortion in 2008; the women indicated whether they had experienced any of 11 troublesome life events at the time, as well as socioeconomic factors and contraceptive use. The researchers also conducted in-depth interviews with 49 women, ages 18 and older, from June to October 2008. Among the women who reported having an abortion, more than 57 percent noted they had faced at least one major life stressor in the preceding year. For instance, nearly 20 percent had lost their job, 16 percent had separated from a partner, 14 percent had fallen behind on rent or mortgage; and nearly 12 percent had moved several times. In addition, 10 percent had experienced the death of a close friend; 10 percent had had a baby; and 7 percent had experienced domestic violence.

Also, poor women were more likely than affluent women to have experienced multiple life stressors, "perhaps because a lack of financial resources prevents them from dealing with the fallout from one disruption and, in turn, a 'chain effect' is initiated," the researchers write. The researchers noted that in 2008 in the United States, women in poverty made up 42 percent of the 1.2 million abortions that year.

Women whose pregnancy is terminated by dilatation and evacuation may have an increased risk of subsequent premature delivery and a low birth weight baby. Very little has been published and no conclusions can be made regarding the effects of instillation procedures and repeated abortions on future reproduction. Although legal induced abortion is considered safe, its potential impact on subsequent fertility, ectopic pregnancy and the length of gestation is a public health concern. A number of previous studies concluded that a history of one induced abortion is not a risk factor for preterm birth (Sam-Tagoe 2007). More recent studies have shown that the risk of preterm birth is higher in women who have undergone induced abortion, and that the risk is related to the number of abortions.

A variety of conditions have been anecdotally ascribed to induced abortion, including subsequent reproductive complications. Since most women obtaining induced abortions are at the beginning of their reproductive life, the effect of induced abortion on subsequent reproduction becomes a very significant one. Our review of the literature confirms findings reported previously. First, except in the case where an infection complicates induced abortion, there is no evidence of an association between induced abortion and secondary infertility or ectopic pregnancy. Second, the risk of mid-trimester abortion, premature delivery and low birth weight in women whose first pregnancy is terminated by vacuum aspiration is not higher than that in women in their first pregnancy or women in their second pregnancy whose first pregnancy was carried to term. However, the risk of having a premature delivery or a low birth weight baby tends to be higher but not significantly among women whose first pregnancy is terminated by induced abortion when compared with women in their second pregnancy than when compared with women in their first pregnancy. This suggests that an induced abortion does not protect women against the known risk of low birth weight for firstborn offspring. Finally, women whose pregnancy is terminated by dilatation and evacuation may have an increased risk of subsequent premature delivery and a low birth weight baby. Very little has been published and no conclusions can be made regarding the effects of instillation procedures and repeated abortions on future reproduction.

Moreover, except for the association between pregnancies following dilatation and evacuation procedures and premature delivery and low birth weight, no significantly increased risk of adverse reproductive health has been observed following induced abortion.

According to Guttmacher Institute (2011), approximately 25% of all pregnancies are terminated in the United States and 43% of all women undergo an abortion at some time in their lives. Therefore, if there is a small positive or negative effect of induced abortion on subsequent health, a large number of women will be affected. Physicians generally divide complications or effects from an intervention or procedure into short term effects, which are up to six weeks after the procedure and long-term effects, which are seen as persistent effects after the six week window has ended. And 10% of women undergoing induced abortion will suffer immediate complications, of which approximately one fifth (or 2%) is considered life threatening. Complication rates increase with greater gestational age of the pregnancy. Immediate complications include: infection, fever, abdominal pain and cramping, bleeding, hemorrhage, blood transfusion with its subsequent risks, deep vein thrombosis, pulmonary or amniotic fluid embolism, injury to the cervix, vagina, and uterus. Others include fallopian tubes and ovaries, bowel, bladder, and other internal organs, anesthesia complications (which are higher with general anesthesia), failure to remove all the contents of the uterus (leaving behind parts of the fetus/baby or placenta), need to

repeat the surgery, possible hospitalization, risk of more surgery such as laparoscopy or exploratory laparotomy, possible hysterectomy (loss of the uterus and subsequent infertility), allergic reactions to medicines, misdiagnosis of an intrauterine pregnancy with a tubal or abdominal pregnancy being present (which necessitates different treatment with medicines or more extensive surgery), possible molar pregnancy with the need for further work-up and treatment), emotional reactions (including but not limited to depression, guilt, relief, anxiety, etc.) death of the woman, risk of a live or live and injured fetus/baby. (Guttmacher Institute 2011)

In conclusion, except for the association between pregnancies following dilatation and evacuation procedures and premature delivery and low birth weight, no significantly increased risk of adverse reproductive health has been observed following induced abortion.

# Measure to Curb or Control Abortion.

According to the Guttmacher Report on Public Policy October 2003, Volume 6, Number 4, in countries around the world, women who are determined to limit their family size and time their childbearing will use all available means to do so; if contraception is not a viable option, women will turn to abortion even if it is illegal. Extensive evidence demonstrates, however, that when modern contraceptives are made available to women, their increased use over time replaces previous reliance on abortion and becomes the major factor associated with reduced abortion rates. Policymakers seeking to reduce the incidence of abortion would do well to address its root cause, unintended pregnancy, by facilitating widespread access to modern contraceptives and by promoting their effective use as a result abortion will be reduced.

Sex education should also be intensified in schools, mosques, churches and the wider society. Obeng (2006), posits that teenagers should be adequately educated about the effects of early marriage, teenage sex and teenage pregnancy. He stresses that when teenagers are adequately educated, they would become aware of the dangers associated with such practices which would help if not all, most of the teenagers refrain from pre-marital sex, early marriage and others which would ultimately bring about reduction in the increase of the population. When teenagers are adequately taught about the effects of sex, most of them would be cautious about such practices thereby preventing them in sexual practices which would result in unwanted pregnancies and early births that would affect their education as well as their standard of living.

Finally, there should be massive public education throughout the whole country by the government. The government has to embark on massive public education campaigns through seminars, workshops and using vans to go round the whole country to educate the people on the consequences of abortion to help reduce the persistent abortion rate amongst the people. As people get to know the dangers associated with abortion, most of them would refrain from such issues and rather limit the number of abortion cases and its effects on women reproductive health.

In a study done in Nigeria, it was found that the highest abortion prevalence and the biggest problems with unsafe abortion and abortion complications occurred among single young women (Olukoya et al 2001). Another study in Nigeria showed that due to different reasons adolescents mostly choose to go to untrained abortion service providers and delay in getting help when complications happen resulted in higher threat of morbidity and mortality. In addition, Adolescents are more likely to experience complications (Olukoya et.al. 2001). Berer on review of national laws and the influence on unsafe abortion Reported that in many countries mortality and morbidity that resulted from abortion are declining due to the legalization of abortion and provision of accessible and affordable safe services (Berer, 2004).

### Methodology

#### **Research Design**

Case study was adopted in the research. The purpose was to obtain information relevant to the phenomenon under study in this research. Case study design enables a researcher to closely examine the data within a specific context.

#### Population

The study was conducted in the Techiman municipality in the Brong-Ahafo Region. The targeted population was on all Doctors and Nurses in Techiman. Accessible population was doctors and nurses at Opoku Agyemang hospital who numbered thirty (30)

# Sample and Sampling Techniques

According to Best & Kahn (1998), there is no fixed number or percentage of subjects that determines the size of an adequate sample, they argued that sample size may depend on the nature of the population, the data to be collected, and the type of analysis to be done and the availability of funds for the study. They implied that a sample size of less than 0.1% of a given population can be a reflection of the opinion of the population (with an error factor of two-thirds if the subjects are randomly selected).fifteen (15) respondents who were willing to answer the questionnaire was selected for sampling size.

The study adopted convenience sampling method. Convenience sampling (also known as Haphazard Sampling or Accidental Sampling) is a type of nonprobability or nonrandom sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study.

#### **Data Collection Instruments**

In collecting data for this research, the researchers used questionnaire to gather the views of the respondents about what they think are some of the causes of abortion, its effects on the reproductive health of women and the possible measures to reduce abortion. This gave the respondents the opportunity to express their views on the issues in detail. The questionnaire was written in simple English language which the responses required them to tick either Yes or No.

### **Data collection Analyses**

All data collected was first sorted out for meaningful analysis according to the distinct category. It was then checked for completeness and internal consistency. Then the responses were checked for relevance and flow of logic, after which the questionnaire were coded and final information organized appropriately. The data was statistically analyzed. The open- ended questions were grouped based on the responses given by the respondents. Qualitative statistics was used to present the data on chart and tables.

#### **Results and Discussions**

# **Demographic Background of Respondents**

This section presents the background characteristics of the respondents whose views were sought for the study. The background variables of respondents measured includes: gender and level of formal education. Following therefore is a presentation indicating the frequency distribution of the sample.

# **Gender Distribution of Respondents**

From Table 1, out of the twenty-one (21) respondents, six (6) representing 28.6% were males and fifteen (15) also representing 71.4% were females.

Frequency	Percentage%
6	28.6
15	71.4
21	100
	6 15 21

Source: field work 2016

#### Level of Formal Education

The variable in this section looked at the Qualifications of the respondents. As presented on Table 2, most of the respondents had attained some formal education. Fourteen (14) of the respondents making up 66.7% were nurses. Other two (2) forming 9.5% of the participants sampled were senior nurses. Four (4) respondents constituting 19.6% were also midwives and the remaining one (1) constituting 4.8% was a Doctor. All respondents drawn by this study from the data have attained some level of formal education; an indication that they had the potential of being informed as far as the consequences associated with abortion procedure was concerned.

Table 3: Level of formal Education

Level	Frequency	Percentage (%)
Nurses	14	66.7
Senior nurses	2	9.5
Midwifes	4	19.0
Doctors	1	4.8
Total	21	100.0

Source: field work, 2016

#### Analysis of the main study Causes of abortion

Abortion often results in maternal injury. The most common complications forms of abortion include hemorrhage as well as more serious complications, such as shock, sepsis and injury to internal organs (WHO, 2011). To determine the actual reasons that lead patients to hospital, respondents were asked to indicate what condition inflicted their patients to come to Hospital using the following listed cases below. As shown on table 3, majority of the patients, that is seven (7) forming 33.3% and another seven (7) also representing 33.3% went to the Hospital as a result of ectopic and rape cases respectively. Five (5) constituting 23.8% reported to the hospital as a result of

Sex preference. And finally two (2) constituting 9.5% reported to health care with issues concerning incest.

Causes	Frequency	Percentage (%)
Incest	2	9.5
Rape	7	33.3
Ectopic	7	33.3
Sex	5	23.8
Total	21	100

Table 3: Causes of Ab	ortion
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Source: field work, 2016

#### **Effects on Reproductive Health of women**

From table 4, out of the twenty-one (21) respondents, twenty (20) representing 95.2% posit that abortion has effects on the reproductive health of women, and the remaining one (1) which is (4.8%) postulate that it has no effects on the reproductive health of the woman.

Table 4: Effects on Reproductive Health of women

Effects	Frequency	Percentage (%)
Yes	20	95.2
No	1	4.8
Total	21	100

Source: Field work, 2016

Abortion also often results in maternal injury. The most common complications from abortion include hemorrhage and incomplete abortion, as well as more serious complications, such as shock, sepsis and injury to internal organs (WHO, 2011). To determine the actual effects that have on patients, the respondent reported as shown in table 5. Out of the twenty-one respondents, ten (10) constituting 47.6% said patients are likely to have vaginal bleeding, three forming 14.2% also went for abdominal pain, and six (6) forming 28.6% also said patients are likely to have constituting Sepsis. one(1)4.8% went in for Cervical/Vaginal lacerations and the same also suggested Uterine Laceration/Perforation. All these effects are likely to affect the reproductive health of women who undergo abortion.

Effects	Frequency	Percentage (%)
Vaginal Bleeding	10	47.6
Abdominal pain	3	14.2
Sepsis	6	28.6
Cervical/Vaginal lacerations	1	4.8
Uterine Laceration/Perforation	1	4.8
Total	21	100

Source: field work, 2016



#### Long term consequences on their health

Studies have shown that persons who undergo abortions often end up with long term consequences such as, barrenness, menstrual pains, vaginal bleeding, multiple uterine scar, and severe bleeding. These conditions, as well as other post-abortion complications, may lead to one of the most pernicious of all long-term abnormalities: secondary infertility (WHO, 2005). To ascertain the veracity of this assertion, respondents were asked if patients have any long term consequences on the condition they had gone through. As shown on table 6, nineteen (19) respondents constituting 90.5% indicated that patients have long term consequences of their condition. The remaining two forming 9.5% said they were not aware of some long term consequences on patients. Again, possible complications in subsequent pregnancies.

Table 6: Awareness of consequence

Awareness of long term consequence	Frequency	Percentage
Yes	19	90.5
No	2	9.5
Total	21	100

Source: Field work, 2016

#### Measures to curb abortion

The legal status of abortion is one factor that determines the extent to which the procedure is safe, affordable, and accessible. In countries where abortion is legal, abortions are more likely to be performed by trained health professionals, be more available, and cost less. In these countries, maternal deaths and injuries tend to be lower. In some countries, written laws or policies on abortion do not necessarily reflect what is actually practiced. Some countries may have a specific law prohibiting abortion, but in practice government officials, the courts, and health care providers interpret the law more broadly, or interpretation can be unpredictable and enforcement of laws can vary.

From the information gathered, out of the twenty-one respondents, eight (8) constituting 38.1% suggested that contraception should be easily available, seven (7)

representing 33.3% insinuate that young people should be given a better teacher than experience. Other four (4) forming 19.1% and two (2) 9.5% suggested that new birth control method and legalized abortion should be created respectively.

	Table	11:	Measures	to	curb	abortion
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Measures	Frequency	Percentage (%)
Make contraception more easily available	8	3.1
Give young people a better teacher than experience	7	33.3
Create new birth control method	4	19.1
Legalize abortion	2	9.5
Total	21	100

Source: field work 2016.

Upon the data collected from our respondents, most of them suggested that the following points listed below can help minimize the problem of abortion in the Techiman municipality.

Health Education should be giving to the public on the media about the causes and imparts as well as the consequences of abortion and the need to seek medical care when confronted with such problem.

Facilitate Family planning methods such coitus interrupts (withdrawal), the use of condom, vasectomy, periodic abstinence (the safe period), Douching, Vaginal Jellies and the use of contraceptives such as pills.

# Summary of Findings, Conclusion, and Recommendations

# Summary of findings

The study was guided by a general objective that sought to look at the phenomenon of the impact of abortion on the reproductive health of women in the Techiman Municipality. Specifically, the study sought to examine the background characteristics of the respondents who are nurses, senior nurses, doctors and midwives who have receive patients on abortion cases, the cause of the pregnancy, what actually influence them to abort the pregnancy, the effects it has on their health and the future pregnancy of the women, the health care they received, as well as the long term consequences and finally measures they think can help curb the problem.

The findings on the background information of respondents indicate that, the female respondents were more than males. Pathways to causes of abortions shows reasons for the abortion and this ranged from incest, rape, ectopic, sex preference, advice from doctors because of complications, peer influence, pressure from parents and unwanted pregnancy.

Findings on effects in the present study showed that majority (10, 47.6%) of the women sampled reported to the health facility with vaginal bleeding, some (3, 14.2%) with abdominal pains, (6, 28.6%) with sepsis and (1, 4.8%) with uterine laceration and cervical vaginal lacerations respectively.

Furthermore, long term consequences such as excessive bleeding, abdominal pain, menstrual pain, barrenness and finally loss life can also occur.

### Conclusion

The data drawn shows that, the losses from abortion captured in this study as the causes and impart of abortion, go beyond the effects on individual woman but also have long term consequences. This is an important finding in and of itself, because it throws more light on the actual causes of abortions.

### Recommendations

Abortions take place where it is legally available with few or no restrictions, and where it is highly restricted. Where abortions are highly restricted, abortions are usually unsafe and carry high risk, causing serious costs or losses for the women and a major financial and service burden on the significant others and even on national health systems in general.

The key to the abortion issue in the researchers 'view is that women gain control over their reproductive (and sexual) lives. Accordingly, reducing the unmet need for contraceptives and eliminating barriers to obtaining family planning services, providing greater access to comprehensive family planning services, including expanding the range of contraceptive options will go a long way to reduce the number of abortion. This, in turn, will reduce the incidence of the effects it has on the reproductive health of women.

There is also the need to promote access to safe legal abortion services for all women, to the full scope of the law. The government and stakeholders in this regard must step up the effort to publicize the availability and accessibility of these services in public-sector facilities and ensure that services are indeed affordable to women of all status.

More campaigns to increase awareness of the legal status of abortion in Ghana ought to be added to the few awareness creation programmes already underway. Husbands and partners should also make it a matter of concern to encourage their women to use modern contraceptive measures to reduce if not eliminate out rightly, the risk of an unintended pregnancy, thereby reducing the likelihood of an abortion.

### References

- 1. Ahiadeke. (2001). Incidence of induced abortion in Southern Ghana. *International family planning perspectives*, 27(2), 96-101.
- 2. Berer M. (2004). National Laws and Unsafe Abortion: The Parameters of Change
- 3. Best, J. W., & Kahn, J. V. (2003). *Research in education (9th ed.)*. Boston: Allyn and Bacon.
- 4. Coppens, C. (1907). Abortion. In The Catholic Encyclopedia. New York: Robert Appleton

- 5. Ghana Maternal Health Survey (2007). Ghana Statistical Service, Accra, in collaboration with Measure DHS *Macro International, Calverton, MD. Available at* http://pdf.usaid.gov/pdf?PNADO176.pdf
- Grimes, DA; Stuart, G (2010). "Abortion jabberwocky: the need for better terminology". Contraception 81 (2): 93–6.
- 7. Guttmacher Institute, Memo on private insurance coverage of abortion, 2011.
- 8. Obeng, H.A. (2006). Sex Education. Ghana. *University Press.*
- Olukoya, A. Kaya, B. J. Ferguson and C. AbouZahr (2001) Unsafe Abortion in Adolescents. *International Journal of Gynecology & Obstetrics* 75 (2):137-147.
- Reproductive Health Matters. Vol. 12, No. 24, Supplement: Abortion Law, Policy and Practice in Transition
- 11. Sam-Tagoe, J. (2007). The Psychology of Man. Ghana, *University Press*.
- 12. World Health Organization, (2009). Unsafe abortion, Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2003. (5th ed).