A Mixed Methods Study of Post Abortion Women and Service Providers in the Ashanti Region of Ghana

by

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…I have just remembered a sad incidence of a young girl whom we lost. She took various concoctions in her attempt to end a pregnancy and was rushed in here bleeding profusely but died. It was after she died that the sonographer working with us mentioned that the girl came to enquire from him about the cost of an abortion and he mentioned the charge. He said the girl told him she had only 30 cedis and asked whether it was possible for her to still access the service. He told her to go and raise the additional money and then come. Since the girl could not raise the extra money, she opted for the cheaper option which led to her death. I told him he should have let her come; we would have done it for her.

(Aunty Charlotte, Midwife)

Abstract

Background: Unsafe abortion is an important public health problem in Ghana contributing to increased maternal morbidity and mortality. While Ghanaian abortion research has explored women's abortion experiences, there is limited evidence from providers. This study examined unsafe abortions from the perspectives of women who sought care for unsafe abortion complications in hospitals and formal and informal abortion providers (pharmacy workers and herb sellers).

Method**:** Employing mixed methods, this study included interviews with 47 participants (24 women, 10 formal and 13 informal abortion providers) and analysis of 133 health records of women who received hospital level, post abortion care. Study participants were recruited from selected hospitals, community pharmacies and markets within the Ashanti region of Ghana. Theories including ecological, stigma and feminist guided data analysis.

Results: Despite access to safe legal abortions, most women preferred illegal medication abortion from pharmacies due to factors including cost and proximity. However, because pharmacy provision of abortion is illegal, it is poorly regulated and monitored, resulting in ill-trained staff who engage in unsafe practices.

In addition, many women in the study delayed seeking, reaching and receiving appropriate abortion care at hospitals. Poor knowledge around pregnancy, underestimation of the seriousness of unsafe abortion complications, cost, stigma and long waiting times at hospitals before care contributed to these delays. This study proposes that women's abortion experiences and access to care can be explained using the three delays model.

Conclusion: The three delays model can guide development of policies and interventions preventing unsafe abortions in Ghana and other low resource settings. There is also the need for regulation of the Ghanaian pharmaceutical industry's provision of medical abortion, and staff properly trained and monitored to save the lives and health of women using their services.

Dedication

This work is dedicated to the memory of my mother Mrs. Elizabeth Otsin.

Acknowledgments

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To my husband, Victor Opoku Brijuu, thanks so much for being my number one cheer leader. To my sons Kobina and Yaw and daughter Adjoa whom I had during this study, I say thank you for coping excellently with my long absence.

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List of Abbreviations

D&C	Dilation and Curettage
GDHS	Ghana Demographic Health Survey
GMHS	Ghana Maternal Health Survey
ICPD	International Conference on Population and Development
KAP	Knowledge Attitude and Practices
MA	Medical Abortion
MDG	Millennium Development Goals
MVA	Manual Vacuum Aspiration
NGO	Non-Governmental Association
R3M	Reducing Maternal Mortality and Morbidity
SDG	Sustainable Development Goal
UN	United Nations
WHO	World Health Organisation

Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis accepted for the award of any degree or diploma. No other person's work has been used without due acknowledgement in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Mercy Nana Akua Otsin

5 June 2021

Chapter 1: Background and rationale

1.1 Introduction

Induced abortions, whether safe, unsafe, legal or illegal are used by women from all spheres of life in resolving unintended pregnancies (Singh, Remez, Sedgh, Kwok, & Onda, 2018). Despite current estimated increases in contraceptive use, induced abortion is said to be one of the most common procedures a woman is likely to undergo during her reproductive life (Chae, Kayembe, Philbin, Mabika, & Bankole, 2017; Jerman, Jones, & Onda, 2016; United Nations, 2019). Yet, because induced abortion often challenges peoples' belief systems and morality, it is a very emotional and controversial issue (Arisi, 2003; Cook, Jelen, & Wilcox, 1993; Faúndes & Barzelatto, 2006). These issues surrounding abortions may be the reason why people often take entrenched positions during discussions about induced abortions, without a dispassionate look at its consequences on the lives and health of women (Arisi, 2003; Cook et al., 1993; Faúndes & Barzelatto, 2006; Jelen & Wilcox, 2003).

This chapter introduces the topic of this thesis 'A mixed methods study on post abortion women and service providers in the Ashanti region of Ghana'. I present some introductory information and the personal experiences which led to my interest in abortion research. I further discuss the study rationale and research questions. An overall structure of the thesis completes the chapter.

1.2 Background to the study

Abortion can be defined as the termination of a pregnancy before the foetus is capable of extrauterine life and is classified as either a spontaneous (commonly named miscarriage) or induced abortion (World Health Organisation, 1995). Induced abortions are the result of deliberate interference aimed at ending pregnancies, whereas in spontaneous abortions, pregnancies end naturally without any deliberate interference (World Health Organisation, 1995) .

Current global estimates indicate that between 2015-2019, 73.3 million induced abortions occurred annually, an increase from the previous annual global induced abortion estimate of 56 million, between 2010-2014 (Bearak et al., 2020; Singh et al., 2018). While in high resource countries, induced abortion is a relatively safe procedure that most women undergo without any major negative consequences on their lives and health, for most women from low resourced countries in Africa, this is not so (Bearak et al., 2020; Ganatra et al., 2017). The estimates reveal that only one out of every four abortions in Africa are done under safe conditions (Ganatra et al., 2017; Singh et al., 2018). Additionally, of the world regions, Africa is estimated to bear the highest burden of unsafe abortion related morbidity and mortality (Sedgh, Bearak, et al., 2016b; Singh et al., 2018). Estimates suggests that 1.6 million African women are treated yearly for abortion related complications: this does not include the thousands who need treatment but are unable to access health care (Guttmacher Institute, 2018a; Singh et al., 2018). Other estimates report that some 16,000 African women die yearly from induced abortion-related complications (World Health Organisation, 2020).

Women who are fortunate enough to escape death from unsafe abortion-related complications, have to live with various debilitating and often irreversible health conditions such as uterine perforation, chronic pelvic pain, infertility and fistula (Haddad & Nour, 2009; Hord, Benson, Potts, & Billings, 2006). The negative consequences of unsafe abortion are not just limited to women's poor physical health, but also their social and mental well-being is affected due to stigmatisation (Levandowski et al., 2012). Consequences of unsafe abortions transcend women to their families and the entire society; in that treating women who suffer unsafe abortion complications drains the financial resources of their families and overburdens the already struggling health systems of many African countries (Aboagye, Gebreselassie, Asare, Mitchell, & Addy, 2007; Guttmacher Institute, 2018a).

In Ghana, where this study is based, a national survey estimated 20% of women within the reproductive ages of 15-49 years have ever had an abortion (Ghana Statistical Service - GSS, Ghana Health Service - GHS, & ICF, 2018). The study identified most of these abortions as unsafe due to they being terminated outside the formal Ghanaian health delivery system (Ghana Statistical Service - GSS et al., 2018). Other small-scale Ghanaian studies on abortion reported most participants as initiating their own abortions or seeking the services of people without the necessary training and qualification to provide such a service (Damalie et al., 2014; Hill, Tawiah-Agyemang, & Kirkwood, 2009).

Unsafe abortion is a significant public health problem in Ghana, contributing to the Ghanaian maternal mortality rate of 310 per 100,000 live births (Ghana Statistical Service - GSS et al., 2018; Ghana Statistical Service - GSS, Ghana Health Service - GHS, & Macro International, 2009; Sundaram, Juarez, Ahiadeke, Bankole, & Blades, 2015). Other estimates suggest unsafe abortions to be responsible for between 15-30% of all maternal deaths occurring to Ghanaian women of reproductive age (Asamoah, Moussa, Stafström, & Musinguzi, 2011). Unsafe induced abortions are the focus of this thesis.

1.3 Research genesis

A combination of experiential and classroom learning experiences increased my awareness and interest on issues concerning induced abortions. I first recount the loss of a relative to complications of an unsafely procured abortion. She already had a son but became pregnant again when her child was still young. Not being ready for the birth of another child, she opted to terminate the pregnancy. In her abortion attempt, she relied on her social network and therefore sought the advice of a friend on how she could end the pregnancy. Unfortunately, the drug the friend gave her to end the pregnancy resulted in complications which led to her death. She left behind her young son who was two years old at the time of her death. When she was dying, she mentioned the person who gave her the medication for the abortion. Since then, relations between both families have been strained. Subsequent to this, the elder sister of this relative also underwent an unsafe abortion, though she survived, the process rendered her infertile. Her sister's child was therefore given to her to raise as her own. Since she was married, and the husband wanted children after trying several medical treatments to help her conceive without success, the husband resorted to impregnating other women and bringing the children home for this relation to raise. She contemplated divorce several times but was urged to stay on in the marriage, as she had become 'damaged goods' due to her inability to bear children of her own. She therefore had no other option than to stay on in the marriage and suffer various forms of abuse from her husband and the community she lived in, due to the high premium placed on childbirth.

The loss of a friend's fertility due to barriers she faced in getting access to safe abortion within the formal health care system also significantly influenced my decision to research induced abortion. The friends were a couple and when they were about to complete their undergraduate university degree, the lady unfortunately became pregnant. In order not to jeopardise her

education and future prospects, they decided on an abortion. Although they did not have money for hospital termination, being mindful of the consequences of a self-induction, they saved up and borrowed some money from friends for hospital termination. In Ghana, access to hospital-based abortions is often limited, especially in the public health systems, therefore women must rely on informal contacts to identify and access the service (Aboagye et al., 2007; Anarfi, 2003; Aniteye & Mayhew, 2013). Unfortunately, my friends ended up contacting the wrong person at the hospital who, though not qualified, arranged and terminated the pregnancy for her. She suffered complications from the procedure which rendered her infertile. Though she and her partner got married after school, they have not been able to have a child. In the Ghanaian and African context where one's inability to have children is considered a great calamity, women who are infertile are constantly exposed to the possibility of being taunted, ridiculed and abused for being childless (Gyekye, 1996). These personal experiences made me acutely aware of the lifelong consequences of the singular act of an unsafe abortion, not only on women, but on families as well and increased my interest in studying more about induced abortions and finding ways in which I could contribute in ensuring that other women do not go through what I have narrated.

This experience culminated in a research study at the Department of Population and Health, University of Cape Coast, Ghana, West Africa, where I also worked as a research assistant. For my Master of Philosophy research, I explored women's reasons for having abortions, using qualitative research methods. I used interviews in gathering data from women with induced abortion-related experiences from a non-governmental organisation (NGO) health facility in a community located within the Greater Accra region, the Ghanaian national capital. The outcome of the study revealed the high incidence of self-induced abortions among study participants. Also observed was the limited access of women to safe abortion services and limited evidence in the literature on those providing abortion to Ghanaian women in both health and non-health facility settings. The study findings were disseminated through open forums and the electronic media. It also led to the publication of a research article titled 'Induced abortion: it is my own body: Women's narratives about influences on their abortion decisions in Ghana (Oduro & Otsin, 2014). This Doctoral study was borne out of the desire to gain further insights into abortion in Ghana and thereby identify ways of reducing women's recourse to unsafe terminations.

Having gathered data for a Master of Philosophy study in the Greater Accra Region for this PhD study, I chose Kumasi in the Ashanti Region of Ghana as the study site. I selected Kumasi due

to its profile on the maternal health scheme of Ghana. Kumasi is in one of the R3M (reducing, maternal mortality and morbidity) regions in Ghana. The Ghana Health Service in collaboration with Marie Stopes International, Engender Health, IPAS, ORC Macro International, Population Council and the Willows Foundation, initiated the R3M program in Ghanaian regions with recognised high incidences of induced abortion. In the R3M regions, the rate of induced abortion stands at 11% compared to the other regions at 5%. Changing the study site and broadening the focus of this PhD study has given me a better understanding of the dynamics of abortions in these two Ghanaian regions with high rates of abortion related, maternal ill health.

1.4 Study rationale and aim

Unsafe abortion is a significant public health problem in Ghana, contributing to morbidity and mortality among Ghanaian women within the reproductive ages (Asamoah et al., 2011; Ghana Statistical Service - GSS et al., 2018; Ghana Statistical Service - GSS et al., 2009; Sundaram et al., 2015). In a bid to reduce unsafe abortion-related health challenges faced by Ghanaian women, the Ghanaian abortion law underwent reforms to broaden the conditions under which women could access safe legal terminations (Morhe & Morhe, 2006). Before 1985, induced abortion was illegal on all grounds in Ghana except to save the life of the woman. Currently, abortions are legal; if the continuation of the pregnancy involves risk to the life or injury to the physical or mental health of the pregnant woman, if there is substantial risk that the child, might suffer from or later develop a serious physical abnormality or disease and if the pregnancy resulted from rape, incest or the defilement of a mentally challenged woman (Morhe & Morhe, 2006).

Access to safe abortion care was recognised as an important reproductive health strategy by the Ghanaian government and the Ministry of Health, if it were to make the needed gains in its efforts at preventing the deaths of women through unsafe abortions (Aboagye et al., 2007; Billings et al., 1999). In line with this aim, further policy reforms were implemented to allow the training and provision of first trimester abortions by other cadres of health workers like midwives, a service originally only within the domain of physicians (Aboagye et al., 2007; Billings et al., 1999; Ghana Statistical Service - GSS et al., 2009). Despite all these reforms to improve women's access to safe legal abortions, some clinicians still interpret the law as totally prohibitive and deny women their right to safe abortions (Aniteye & Mayhew, 2013; Morhe & Morhe, 2006; Payne et al., 2013). Aniteye and Mayhew (2013) note of instances where due to fear of prosecution, health workers

with the needed training and willingness to provide abortions often charge exorbitantly, provide abortions clandestinely and further record them wrongly as either spontaneous abortions or diagnostic dilation and curettage. In such situations women who are economically challenged are denied access to safe abortions and have no option than to seek self-induced abortion or rely on the services of untrained abortionists, who provide cheap but unsafe abortions (Clark, Mitchell, & Aboagye, 2010; Henry & Fayorsey, 2002). Besides, both national and small-scale studies have reported instances where many Ghanaian women with abortion intentions terminate their pregnancies outside the formal health delivery system (Ahiadeke, 2001; Ghana Statistical Service, Ghana Health Service, & ICF International, 2018; Morhe & Morhe, 2006).

This notwithstanding, studies on induced abortion within the Ghanaian context have presented evidence using mainly quantitative and a few qualitative methods of research from the perspectives of women with induced abortion-related experiences (Adanu, Ntumy, & Tweneboah, 2005; Ahiadeke, 2001; Dickson, Adde, & Ahinkorah, 2018; Lassey, 1995; Mote, Otupiri, & Hindin, 2010; Oliveras, Ahiadeke, Adanu, & Hill, 2008; Sundaram, Juarez, Bankole, & Singh, 2012; Turnpin, Danso, & Odoi, 2002), with limited focus on the range, motivations and experiences of abortion providers. The few available studies on induced abortion provision in Ghana, have mainly focused on physicians and midwives providing hospital-based abortions (Chavkin, Baffoe, & Awoonor-Williams, 2018; Oppong-Darko, Amponsa-Achiano, & Darj, 2017; Payne et al., 2013).To offer new insights on unsafe abortions in Ghana, I employed mixed methods research in investigating the abortion seeking experiences of women and people providing these abortions to Ghanaian women in both hospital settings (formal abortion providers-midwives, gynaecologists, physician assistants) and non-hospital-based settings (Informal abortion providers- pharmacy workers and herbal medicine sellers).

The overall aims of this study were to explore the abortion related experiences of women who sought care for complications from hospitals following unsafe abortions, and those of formal and informal abortion providers. I aimed to achieve this by providing insights into the unsafe abortion journeys of women, and the knowledge, attitudes and practices of formal and informal abortion providers, because they play an important role in determining how, when and where women can access services.

1.5 Research questions

This study is guided by three overarching research questions:

1. What are the knowledge, attitudes, and practices of Ghanaian abortion providers in hospital and non-hospital-based settings?
2. What are the experiences and influences on Ghanaian women who sought care in hospitals following unsafe abortions?
3. What does a chart audit reveal about the characteristics of Ghanaian women attending a non-governmental based hospital for abortion care?

The first two questions were answered by collecting qualitative research evidence from the perspectives of both women and abortion providers. The third research question is answered by an analysis of quantitative data from clinical notes on women who sought induced abortion care in an NGO operated hospital.

1.6 Overview of the thesis

I outline the structure of the thesis in this section:

Chapter One: I present some background information and how my personal experiences shaped my interest in the research topic. I also discuss the rationale, objectives and research questions guiding the study.

Chapter Two: I review the literature around induced abortion and contraception. I present evidence to date from the global, African and Ghanaian contexts.

Chapter Three: In this chapter, I describe and justify my choice of research methodology. I describe the methods for this study on induced abortion including relevant theoretical perspectives, ethical issues, recruitment of participants, chart audit sampling and then the ecological model used for structuring data analysis and research findings.

Chapter Four: The first of four substantive findings chapters, this chapter is presented at the individual level of the ecological model and explores the influences of individual participants on abortion provision and seeking.

Chapter Five: The second findings chapter is organised around the community level of the ecological model and presents community level influences on the induced abortion related experiences of providers and women.

Chapter Six: The third findings chapter presents societal level influences on the induced abortion related experiences of abortion providers and women with induced abortion related experiences.

chapter Seven: The final findings chapter presents twelve month sample of hospital chart audit data and explains the association between the sociodemographic characteristics of women and their abortion and family planning decisions.

Chapter Eight: This final chapter discusses the key study findings in the context of previous research, considers the strengths and limitations of the study, proposes a model of three delays as it relates to unsafe abortion and concludes with implications and recommendations of the study's findings.

1.7 Summary

In this introductory chapter, I have outlined background information on induced abortion in Ghana and the reasons for my interest in the topic. The study rationale, aims and research questions have been outlined. In the next chapter, evidence on induced abortion, from global, African and Ghanaian perspectives are presented.

Chapter 2: A review of current evidence about safe and unsafe abortion globally, in Africa, and in Ghana

Ideally, pregnancy is supposed to be a happy event for women, their partners and families. However, this is not always the case, as many women experience unintended pregnancies. Women are often confronted with unintended pregnancies when their chosen method of contraception is either used ineffectively or fails to offer protection from pregnancy. At other times, an unintended pregnancy might result from the non-use of contraception. Reasons for contraception non-use might include misunderstandings about fertility, partner opposition, substance abuse and fears about the side effects of contraception (Black & Day, 2016; Sedgh, Ashford, & Hussain, 2016; Sedgh & Hussain, 2014). Women also experience unintended pregnancies from sexual coercion, rape and incest (Biggs & Foster, 2013; Miller et al., 2010; Samankasikorn, Alhusen, Yan, Schminkey, & Bullock, 2018).

Though recent global estimates indicate general decline in the incidence of unintended pregnancy, increases in the percentage of women using induced abortions to resolve their unintended pregnancies have been observed (Bearak et al., 2020). Additionally, a significant body of evidence (across low- and high- income countries), demonstrates most unintended pregnancies end in abortion, under both safe and unsafe conditions (Bearak, Popinchalk, Alkema, & Sedgh, 2018; Finer & Zolna, 2011; Guttmacher Institute, 1999, 2018b; Jones, Zolna, Henshaw, & Finer, 2008; Singh et al., 2018). In this chapter, I present an overview of literature on induced abortion. While my focus is on Ghana, I draw on abortion research from various perspectives and contexts with the aim of gaining a greater insight on induced abortion globally.

2.1 Historical background

Induced abortions have been relied on by women in both past and present times to control their fertility. Many authors point to its frequency across time and culture. Some texts mention ancient Greece, China, Rome and Egypt as places where abortion was practiced (Bleek, 1978; Chavkin, Stifani, Bridgman-packer, Greenberg, & Favier, 2018; Devereux, 1955; Drife, 2010;

Guttmacher Institute, 2017b; Potts & Campbell, 2009; Riddle, 1997). Others believe it is the oldest and the most used method of fertility control (World Health Organisation, 1989). In China, for instance, Wilcox and Horney (1984) write of the use of mercury as an abortifacient some 5000 years ago, whereas a mixture of honey and crushed dates made in the form of a pessary was argued to have been relied on by ancient Egyptian women desiring to abort their unintended pregnancies (Drife, 2010; World Health Organisation, 2011b). Women, in their desperation to end a pregnancy, were also noted to throw themselves from the top of hills, wear very tight belts, undergo vigorous abdominal massages and engage in physically exerting activities believed to damage the uterus andultimately result in an abortion (Devereux, 1955; Grimes et al., 2006; World Health Organisation, 2007a).

It is important to note that most of these earlier methods of abortion were often very dangerous and had horrific consequences for women's health. Notwithstanding this, knowledge about these means of terminating pregnancies were often passed on from one generation to the next and varied according to the cultural beliefs and practices of the community (Bleek, 1978; Bleek & Asante-Darko, 1986; Devereux, 1955; World Health Organisation, 1995).

During the 19th and early 20th centuries, abortion was practiced by women in secret and mostly involved an array of substances from various plant and animal parts which were made into teas, decoctions, enemas and pessaries. Other methods of abortion were ingestion of toxic substances (various concoctions mixed with livestock manure, concentrates of herbal plants), use of trauma and introduction of foreign bodies into the uterus (Drife, 2010; Grimes et al., 2006; Riddle, 1997).

As Riddle's (1997) work on the history of abortion and contraception in the west shows; herbal plants such as pennyroyal (*Mentha pulegium L.)*, Queen Anne's lace (*Dacus carota L.),* squirting cucumber (*Ecballium elaterium*) and silphium made into pessaries and decoctions were used by women desiring to end their pregnancies. Legend has it that silphium was such an effective and popular abortifacient that it was harvested to the point of extinction (Riddle, 1997). It is important to note that while most of these means of terminating pregnancies are unsafe and inimical to the lives and health of women, some women, especially, from low and middle-income settings still rely on them (Haddad & Nour, 2009). One reason for this, is the lack of access to affordable contraception.

2.2 Unmet need for contraception

To help women prevent unintended pregnancies, births and induced abortions, using an effective means of contraception is essential (Sedgh, Ashford, et al., 2016). Contraception or birth control is the intentional prevention of pregnancy through the use of natural or traditional and modern methods (Jain & Muralidhar, 2011; Marquez, Kabamalan, & Laguna, 2017). Within the context of this study, natural or traditional means of contraception includes all methods of birth control which do not involve the use of medications or physical devices, but instead relies on the signs and symptoms of the fertile and infertile phase of a woman's menstrual cycle (Rossier & Corker, 2017; World Health Organisation, 1988). Natural contraception include methods of pregnancy prevention like the calendar rhythm method, basal body temperature, Coitus interruptus, lactational amenorrhoea and cervical mucus examination (Marquez et al., 2017; Rossier & Corker, 2017). Modern contraception on the other hand, involves the use of artificial means or techniques in pregnancy prevention, they include methods like IUDs, oral contraceptive pills, injectables and condoms (Jain & Muralidhar, 2011). There are situations however, where women who have the desire to either space or limit births might not be using contraception or may be using ineffective methods of birth prevention (Amo-Adjei & Darteh, 2017;Ong, Temple-Smith, Wong, McNamee, & Fairley, 2012).

The association between unmet need for contraception, unintended pregnancies and induced abortions have been well documented (Abdi & Gebremariam, 2011; Deschner & Cohen, 2003; Guttmacher Institute, 2017a; Singh, Darroch, & Ashford, 2014; Singh, Darroch, Ashford, & Vlassoff, 2009). Unmet need for contraception is the situation where a woman desires to limit or space births, but is either not using a method of birth control/prevention or is using contraception with low efficacy (Bongaarts, 1991). Women with an unmet need for contraception might either have an unmet need for spacing or limiting births. Unmet need for spacing refers to women who want to delay their births for certain periods, whereas women with unmet need for limiting, have reached their desired fertility but are not using any means of contraception (Bradley, Croft, Fishel, & Westoff, 2012). Unmet need for contraception is argued to be generally a problem in low- and middle-income settings, especially among women living in the world's poorest countries (Guttmacher Institute, 2017a; Peterson, Darmstadt, & Bongaarts, 2013).

According to the Guttmacher Institute, a leading research and policy organisation committed to advancing global sexual and reproductive health and rights, including induced abortions (2017a), 214 million women in low and middle income settings (of reproductive age), have an unmet need

for contraception. While unmet need for contraception is common across low- and middle-income countries, regional variability exists in its incidence. Higher rates of unmet need for contraception were reported among Southern Asian and Sub-Saharan African women, which may suggest an increased risk of unintended pregnancies and induced abortions among them (Guttmacher Institute, 2017a; Singh et al., 2018). In 2017, some 84% of all unintended pregnancies, which occurred in low and middle income countries were among women with unmet need for contraception (Guttmacher Institute, 2017a).

Evidence suggests women might not be using contraception for various reasons. In a review of several nationally representative and small-scale studies (Bongaarts & Bruce, 1995), reported the fear of negative side effect as a major reason for the non-use of contraception. Other important reasons identified for contraception non-use were the lack of knowledge about methods and disapproval from the families and social networks to which women belong (Bongaarts & Bruce, 1995). Though informative, this study was confined to only married women and women in consensual unions, without considering the reasons for contraceptive non-use among single sexually active women. In other studies on contraception in low resource settings, factors including negative staff attitudes particularly toward unmarried women, poor supply issues such as stock outs, distribution bottlenecks and the limited availability of contraceptive methods acceptable to women were reported to affect contraception access (Ahanonu, 2014; Grindlay, Turyakira, Kyamwanga, Nickerson, & Blanchard, 2016; Hasselback et al., 2017).

Meeting the contraceptive needs of women in low and middle-income settings is an important goal for a public health agenda. The Guttmacher Institute argue that effective contraception use could lead to a three-quarter decline in unintended pregnancies (from 89 million to 22 million per year), unplanned births (from 30 million to 7 million per year) and induced abortions (from 48 to 12 million per year) (Guttmacher Institute, 2017a).

2.3 Induced abortion worldwide

Unintended pregnancy is a primary reason why women have abortions globally (Bearak et al., 2018; Singh et al., 2018). Although an unintended pregnancy could be the result of a contraceptive failure (Black, Gupta, Rassi, & Kubba, 2010; Finer & Zolna, 2016), there appears to be an association between contraceptive non-use, unintended pregnancies and induced abortions as

well (Bearak et al., 2018; Sedgh & Hussain, 2014; United Nations, 2014). Using data from 166 low, middle and high- income countries; a recent global study on unintended pregnancies and induced abortions reported general global declines in the incidence of unintended pregnancies (Bearak et al., 2020). The study however, observed that despite these global declines in unintended pregnancies, there was a slight increase in the proportion of unintended pregnancies resolved through induced abortions; 59% between 2010-2014 to 61% between 2015-2019 (Bearak et al., 2020).

Currently the global abortion rate stands at 39 abortions per 1000 women (Bearak et al., 2020). There are, however, notable variations in the rates of induced abortions occurring in high and low resource settings. Whereas the available evidence reveals a rate of 38 per 1000 abortions for women from low resource settings, that of women from high resourced settings is 15 per 1000 (Bearak et al., 2020).

In another global study on induced abortion, of the 56 million reported global abortions estimated to occur annually, a majority (49.3 million) were observed to have to occurred in low and middle income settings, whereas 6.6 million occurred in high resource settings (Singh et al., 2018). Thirty-one million of the annual global abortions were done in a safe manner, while 25 million (representing a quarter of all global abortions) occurred under unsafe conditions (Guttmacher Institute, 2018c). Singh and colleagues (2018) stressed that most safe abortions occurred in high resource settings and unsafe abortions in low and middle-income settings. Commenting further on the sub-regional levels of abortion safety, Singh and colleagues noted that high levels of *safe* abortions were recorded in North America and Europe (Singh et al., 2018). Over half of all the global incidences of *unsafe* abortions were estimated to have occurred in Asia, possibly due to their population size. Latin America and Africa, on the other hand, recorded only one out of every four abortions being terminated in a safe manner (Ganatra et al., 2017; Singh et al., 2018; World Health Organisation, 2020).

2.3.1 Unsafe abortion

Unsafe abortion is the procedure for terminating unintended pregnancies, either by people without the necessary medical skills or in an environment that does not conform to the minimal medical standards or both (World Health Organisation, 2011b). Unsafe abortion procedures are usually characterised by illegality, lack of provider skills, hazardous techniques, unsanitary facilities and complications (World Health Organisation, 2007b, 2020). Unsafe abortion is argued to be

common in places where abortion is either illegal or restricted by law. In these settings, women faced with unintended pregnancies often self-induce abortions through various means like ingesting toxic substances, including turpentine, bleach and various concoctions (Grimes et al., 2006; Haddad & Nour, 2009). The use of herbal preparations, some of which are inserted in the vagina or used as an enema, have also been reported (Grimes et al., 2006; Haddad & Nour, 2009). Women have also been found to obtain clandestine illegal abortions from unskilled individuals (Bearak et al., 2018; Ganatra et al., 2017; Haddad & Nour, 2009; Marlow et al., 2014; Sedgh, Bearak, et al., 2016a; Sedgh, Henshaw, Singh, Åhman, & Shah, 2007; Singh et al., 2018; World Health Organisation, 2011a).

In many parts of the globe, especially in low- and middle-income settings, unsafe abortion is a major public health issue. In a bid to mitigate its negative consequences, several global initiatives have been established. The gathering of the World Health Assembly in 1967, was one of the first in the series of international meetings highlighting the contribution of unsafe abortions to global maternal ill health and deaths (World Health Organisation, 1989). In 1987, another global initiative (the Safe Motherhood Conference) organised in Kenya was similarly aimed at reducing global maternal ill health and deaths. At the end of the meeting, a resolution stating that irrespective of the legal status of abortions, humane treatment should be given to women experiencing complications of sepsis and incomplete abortions was passed. The provision of post-abortion contraceptive advice and services to prevent repeat abortions was also suggested (Cohen, 1987). In 1994 at the International Conference on Population and Development (ICPD), 11,000 representatives from various bodies across the world gathered to discuss ways of reducing maternal mortality, including unsafe abortion (United Nations, 1995). At the close of the forum a resolution was passed, which recommended the provision of comprehensive reproductive care, including the provision of safe abortions where legal. Subsequent fora like the ICPD+5 (five-year review of ICPD) and the Beijing Platform of Action which brought together governments, non-governmental and intergovernmental organisations, also passed resolutions aimed at reducing the negative health impacts of unsafe abortions and improving uptake of contraception. In 2000 among the eight Millennium Development Goals (MDG's) set up by the United Nations, one goal (no.5) was devoted to the reduction in global maternal deaths (United Nations, 2015a). Efforts at reducing unsafe abortion related mortality was stressed as important to the achievement of this goal (United Nations, 2015a). Building on the MDGs, the Sustainable Development Goals (SDG's) have targets set to achieve further significant reductions in global maternal death rates by 2030 (United Nations, 2015b). Though these global initiatives have led to declines in the numbers of

unsafe abortions and the severity of associated complications, in many low- and middle-income country settings, unsafe abortion-related complications remain a major public health problem (United Nations, 2015b).

Due to the development of simpler abortion techniques, like manual vacuum aspiration and medical abortion, that allow the provision of safe terminations by non-physician health workers, Ganatra and colleagues (2017) argued for the need for a re-categorisation of the levels of abortion safety. They re-categorised unsafe abortions as *less* and *least* safe abortions. They termed abortions performed by trained providers using outdated method like cervical dilation and uterine curettage (D&C) as *less safe*. An example is a trained provider conducting a D&C which has been outlawed by the World Health Organisation (WHO), due to the high levels of risk associated with the procedure used (Ganatra et al., 2017). Terminating pregnancies through medical abortions by people without the necessary training is also termed a *less safe* abortion. Terminations either done by untrained people using invasive methods or through the administration of toxic substances are placed under the *least safe* category of abortion. Between 2010-2014, 25 million unsafe abortions were estimated to have occurred; this was made up of 17 million *less safe* and 8.0 million *least safe* abortions (Ganatra et al., 2017).

Consequences of unsafe abortion: maternal mortality, morbidity and economic impact

Every year, unsafe abortion related deaths are estimated to contribute between 4.7 % to 13.2% of the global burden of maternal mortality (World Health Organisation & Guttmacher Institute, 2018). This translates to the loss of the lives of some 22,800 women annually (Singh et al., 2018). Women in low- and middle-income countries have been consistently documented to be at the greatest risk of dying from unsafely procured abortions (World Health Organisation, 2018; Singh et.al. 2018). While the case fatality rate for an unsafe abortion is 30 deaths per 100, 000 procedures in high resourced settings, that of low and middle income settings is estimated at 220 deaths per 100,000 (World Health Organisation, 2020; World Health Organisation & Guttmacher Institute, 2018).

Women who are fortunate to escape death after going through an unsafe abortion might experience incomplete abortions, which occurs when all the products of conception fail to be expelled. Due to unsafe abortion practices, the uterus could be perforated, women might experience post-abortion sepsis, damage to their genitals, internal organs or may haemorrhage and would need to be attended to by a physician (Grimes et al., 2006; Singh, 2010). Previous

studies suggest hospitalisation rates of 5 million women yearly, for the treatment of abortion-related complications, while more recent studies show an increase to 7 million (Singh & Maddow-Zimet, 2015; Singh et al., 2018). This is in addition to the thousands of women who need treatment but are not able to afford health care, women who delay going to hospitals due to an underestimation of complications experienced, and women who avoid hospitals due to fear of abuse and mistreatment from health workers (Guttmacher Institute, 2018c; World Health Organisation, 2020; World Health Organisation & Department of Reproductive Health and Research, 2007).

The effects of unsafe abortions could also be long term. Every year, 1.6 million survivors of unsafe abortions are estimated to experience secondary infertility (Guttmacher Institute, 2018c). Also, between 3 and 5 million suffer reproductive tract infection which could impair their future fertility. Given the fact that unsafe abortion and its associated complications are totally preventable and most occur in low- and middle- income settings, where fertility is so cherished, makes it all the more poignant (Guttmacher Institute, 2018c).

Apart from the impact of unsafe abortions on the lives of women, the economic cost is also significant. Vlassoff, Shearer, Walker, and Lucas (2000) estimates on the economic impact of unsafe abortion related mortality and morbidity (in selected low- and middle- income settings), suggests that between $375 and $838 million dollars is spent annually in treating women who experience unsafe abortion complications. Additionally, national economies are estimated to lose more than $400 million dollars yearly from productivity losses from women who experience abortion complications. The estimates also show families losing about $600 million dollars from treating family members who suffer abortion complications (Vlassoff et al., 2000).

2.4 Global abortion legislation

Though history abounds with societies having restrictive laws and regulations governing abortions, women have continued to have abortions despite these regulations. As argued by Simon (1998), most of these laws reflect the social, economic, political and religious values of society. According to Berer (2017), global restrictions on abortions were mainly enacted during the period of colonisation around the 16th century. Britain and France are argued to have greatly influenced global abortion legislation, with their imposition of restrictive abortion laws in their colonies.

In a global study on induced abortion, Singh et al. (2018) indicated that efforts at reforming

abortion laws started in the Soviet Union during the 1950's and gradually spread to the rest of the world. Another worldwide study on induced abortion which examined global abortion laws, identified various categories into which the world's abortion laws could be placed (Berer, 2017). The study suggested that there are countries where there is a total restriction on abortion, except to save the life of the woman. There are countries where legal abortions are allowed if the pregnancy resulted from rape or sexual abuse, when there is a high probability of foetal anomaly, when the pregnancy is either causing a risk to the physical or mental health of the pregnant woman, under social and economic reasons and, then finally under request (Berer, 2017). Legal abortions to save the life of pregnant women are allowed in 98% of the world's countries. Sixty three percent (63%) of countries allow abortions to preserve the physical health of women. Abortions on the grounds of rape, sexual abuse or incest are allowed in 42% of countries. Abortions on the grounds of foetal anomaly is allowed in 39% of countries, economic or social reasons 33% and on request 27% (Berer, 2017; Singh et al., 2018). Their research notes that abortions are generally permitted on more broad grounds in high resource, rather than low- and middle-income countries. They further revealed that abortion is permitted on request in 65% of high resource countries, but only 14% of low- and middle-income countries. For economic and social reasons, it is permitted in 75% of high resource countries, but only 19% of low- and middle-income countries (Berer, 2017; Singh et al., 2018).

Guttmacher Institute also published 'Abortion worldwide 2017: Uneven progress and unequal access' and found that 6% of the estimated 1.6 billion women of reproductive age across the globe live in countries where abortion is totally restricted. Twenty one percent (21%) live in countries which only allow abortion if it is to save a woman's life (Singh et al., 2018). In Africa since the early 1990s, many countries have initiated moves towards liberalisation of abortion laws. Nonetheless, the laws governing abortion on the continent are still generally strict. South Africa, Cape Verde and Tunisia are the only three countries on the continent that allow abortion without restriction, but with gestational limitations (Guttmacher 2018). However, despite these restrictions placed on the procedure, African women still undergo induced abortions, most of which are through clandestine and unsafe means. It is clear that legal restrictions placed on abortions do not prevent its occurrence.

In Ghana, abortion is a criminal offence governed by Act 29, section 58 of the Criminal Code of 1960, amended by the Provisional National Defence Council (PNDC) Law 102 of 1985 (Morhe & Morhe, 2006). Under the law, anyone using a substance, instrument or other means with the

intent to cause an abortion is guilty of an offence and is liable to imprisonment for a term not more than five years. Legally permissible abortions are however allowed in instances where the continuation of the pregnancy poses a risk to the life, physical or mental health of the pregnant woman, if there is substantial risk that the child might suffer from or later develop a serious physical abnormality or disease, and if the pregnancy resulted from rape, incest or the defilement of a mentally challenged woman. It must however be performed by a registered medical practitioner specialising in gynaecology, or any other registered medical practitioner in a government hospital, private hospital or a clinic registered under the private Hospital and Maternity Home Act 1958 (No.9) or in a place approved for the purpose by a legislative instrument made by the secretary (Morhe & Morhe, 2006). Current estimates, however, reveal 71% of all abortions occurring in the country as illegal (Polis et al., 2020)

To increase access to safe legal abortions, various policies and interventions have been designed and implemented by the Ghanaian health authorities. However, the development of positive attitudinal changes by health care workers have been slow, as most interpret the law either liberally or restrictively based on their views about abortion (Aniteye & Mayhew, 2019).

2.5 Reasons why women induce abortions

Women the world over cite various interrelated reasons for seeking abortion. The need to understand these reasons is important in shaping policies aimed at reducing the incidence of unwanted pregnancy and abortion (Finer, Frohwirth, Dauphinee, Singh, & Moore, 2005). In a nationally representative, multi-country study on women's reasons for undergoing abortions, the desire to stop or postpone childbirth emerged prominently. In 20 out of 27 countries where data were gathered, participants spoke of undergoing abortions for purposes of either spacing or limiting their births (Bankole, Singh, & Haas, 1998). In a US study using surveys and interviews; most women attending an abortion facility for care, cited socio-economic reasons for their abortions. Concerns like avoiding an interruption in education, jobs and providing better care for existing children were reported (Finer et al., 2005). Women's unfavourable socio-economic circumstances and their desire for birth spacing/limiting (as reasons for seeking abortion) is confirmed in another multi-country study (Chae, Desai, Crowell, & Sedgh, 2017).

The most recent national study on Ghanaian maternal health, including induced abortions, which used representative samples from all the administrative regions in Ghana, found the three

most common reasons for undergoing abortions were: being too young/wanting to delay child birth, financial difficulties and birth spacing (Ghana Statistical Service et al., 2018). Comparing this to an earlier similar study, financial difficulty was the most common reason, followed by the desire to delay childbirth and then to avoid a disruption in schooling (Ghana Statistical Service, Ghana Health Service, & Macro International, 2009).

Partner violence and abuse-related reasons and induced abortion

Whether women are in an intimate relationship, the type of union they find themselves in influences what they do in the event of an unintended pregnancy. Studies indicate that women in violent sexual relationships have higher odds of not only having abortions but repeat abortions (Aston & Bewley, 2009; Hall, Chappell, Parnell, Seed, & Bewley, 2014). Violent relationships are often characterised by fear and controlling behaviours of partners. Such behaviours increase women's chances of experiencing sexual abuse as well as coercion and into having sexual relations against their will. Studies have found that partners of women in violent relationships use fear and violence to sabotage, oppose and prevent negotiation in the use of contraception, thereby increasing women's chances of experiencing unwanted pregnancies (Aston & Bewley, 2009; Grace & Anderson, 2018; Hall et al., 2014).

A WHO multi-country study which explored the association between intimate partner violence (IPV), abortion and unintended pregnancies in selected low- and middle-income countries, found increased risks of unintended pregnancies and abortions among women with a history of IPV (Pallitto et al., 2013). Prevalence of IPV among women with unintended pregnancies was reported to range between 35% in Thailand to 3% in Brazil. In addition, it seemed 79% of all abortions in Ethiopia were attributed to IPV, whereas only 9% of abortions in Serbia and Montenegro was attributed to IPV. The study further recommended that reducing the incidence of partner violence by half could lead to significant reductions in the burden of unintended pregnancies and induced abortions (Pallitto et al., 2013).

Accumulated evidence also points to the association between IPV and negative reproductive outcomes across various countries. In Bangladesh using population-based surveys, Silverman, Gupta, Decker, Kapur, and Raj (2007), found that poor, less educated and Muslim women were at higher risks of experiencing IPV, unintended pregnancies and induced abortions. In Timor-Leste, however, Taft, Powell, and Watson (2015) observed no significant difference in unintended pregnancy rates among women who had experienced IPV and those who had not. Significant

differences were, however observed in the rates of induced abortion, with women who had experienced violence at increased odds of undergoing abortions compared to those who had not.

According to findings from the Turn Away study (a rigorous longitudinal study of 954 abortion patients in 30 health facilities across the USA between 2008 and 2010), nearly one third of all abortion patients reported partner influences as reasons for their abortions (Chibber, Biggs, Roberts, & Foster, 2014). Among these women, 8% mentioned their abusive partners were the reason for their decision to seek abortion. Women are sometimes attacked by their violent partners in efforts to cause spontaneous abortions or threatened with violence if they did not terminate the pregnancy. Women also sought abortion as a means to leave abusive relationships, as they rationalised that it would be easier to leave such relationships if no children were involved (Chibber et al., 2014).

In a large population-based study of Peruvian women (18-29 years), with multiple sexual partners, higher odds of having abortions were reported due to increased risk of contraceptive failure and unintended pregnancies (Bernabé-Ortiz et al., 2009). Bleek (1981) suggested women engaged in multiple relationships could also decide to undergo abortions in the event of an unintended pregnancy, to hide the fact that they were involved in multiple relationships. Many studies have found that whether women are married or not could also affect their decisions when they experience an unintended pregnancy.

Marital status and induced abortion

In many cultures, the dominant moral ideology is that sexual activity, pregnancy and childbirth must take place in formally recognised marital unions (Johnson-Hanks, 2002; Schuster, 2005). However, due to global increases in age at first marriage, more women are having premarital sex (Johnson-Hanks, 2002; Schuster, 2005). Women who find themselves pregnant before marriage sometimes use abortion to avoid out of wedlock birth, and also conceal their engagement in premarital sex (Johnson-Hanks, 2002; Schuster, 2005; Singh et al., 2018). Exposure to the risk of pregnancy increases when women are married. Married women who have achieved their desired family size or those who want to space their births but are not using contraception, sometimes use induced abortions to terminate their pregnancies (Lauro, 2011). Although a woman might desire to abort a pregnancy, there are various barriers that could hinder her from acting on her decision.

2.6 Barriers to accessing safe abortion services

Women who want to undergo abortions could sometimes be prevented from achieving their ambitions due to various individual and contextual barriers. I start the section with a discussion on provider attitudes and how they could prevent women from accessing abortion services.

2.6.1 Provider attitudes

Access to safe abortion has been known to be affected by several factors, including provider attitudes (Assefa, 2019). Provider attitudes to abortion affects women's access and may lead to provision of abortion at the discretion of the provider (Aniteye & Mayhew, 2013; Röhrs, 2017). In such circumstances, where providers see abortion as an important service (needed to safeguard the health and reproductive autonomy of women), they may provide it. On the other hand, providers who view abortion as being against their religious and moral inclinations, may deny women access to terminations (Aniteye & Mayhew, 2013; Harries, Stinson, & Orner, 2009). Medical professionals' views on the provision of safe abortions show a positive relationship between health workers' knowledge of the local abortion laws and their support for safe legal terminations (Kade, Kumar, Polis, & Schaffer, 2004). Where health workers know the legal regime surrounding abortions, they are more willing to provide terminations than those with no knowledge. The studies further showed a positive relationship between years of practice, the type of health facility they worked in (private or public), the training in abortion provision during residency and their attitudes towards providing abortions (Kade et al., 2004; Wheeler, Zullig, Reeve, Buga, & Morroni, 2012).

In a Nigerian study, Koster (2003) observed occasions where health workers with negative attitudes toward abortion, were known to "abuse, mock and reprimand women seeking abortions for their immoral and foolish behaviour" (p.124). In a qualitative study involving 48 participants, Harries, Cooper, Strebel, and Colvin (2014) further reported situations in South Africa where health workers' attitudes (including those not directly involved in abortion provision), acted as barriers to women desiring terminations. They stressed instances of pharmacists refusing to dispense abortifacients and ward staff not being courteous to women needing terminations. They observed nurses refusing to either assist or set up theatres for doctors to provide terminations, based on

abortion being against their religious and moral inclinations. Another qualitative South African study by Lie, Robson, and May (2008), reported that negative attitudes displayed by health workers might be meant to act as a deterrent to both women seeking terminations and their associates with whom they would share their experiences. This fear of mistreatment by health care providers could contribute to women seeking abortions from informal abortion providers (Chemlal & Russo, 2019; Gerdts et al., 2017).

This notwithstanding, providers have been found to display more positive attitudes to women seeking terminations under circumstances like rape, incest, foetal anomaly or if the pregnancy poses a threat to the woman's life (Harries et al., 2009; Harrison, Wilkinson, Montgomery, & Lurie, 2000). Similar positive attitudes towards women seeking abortions under similar conditions are corroborated across various settings in both small and multi-country surveys among health care workers (Dodge, Haider, & Hacker, 2016; Loi, Gemzell-Danielsson, Faxelid, & Klingberg-Allvin, 2015).

2.6.2 Gestational limitations and waiting times

The world over, even in places where abortion is legalised, there are restrictions on where and under what circumstances women can access terminations. Regulations like gestational limitations and waiting times between seeing a doctor and when the abortion is carried out, can impact on abortion access (Guttmacher Institute, 2018d; Jerman & Jones, 2014; Sanders, Conway, Jacobson, Torres, & Turok, 2016). By the time a woman finds herself with an unintended pregnancy, decides on a termination and finds a place to have her pregnancy safely terminated, she might have moved to the second trimester, which carries greater maternal health risk during termination. Additionally, such abortions are more expensive and is provided by fewer health facilities. Given the fact that not all women could scale these barriers, they could be prevented from seeking a much-desired termination (Jerman & Jones, 2014; Jones & Weitz, 2009). Delays experienced by women in terminating unwanted pregnancies could be due to late recognition of pregnancy, deciding on a termination, going through the referral system, finding a provider and then finally raising the needed amount of money to pay for a safe abortion (Harries, Orner, Gabriel, & Mitchell,2007; Jerman et al., 2016; Jones & Jerman, 2016). Studies in the USA suggest that 95% of health facilities provide only first trimester abortions and an estimated 4000 women in a year were denied a termination because of this restriction (Harries et al., 2007; Jones & Kooistra, 2011;

Upadhyay, Weitz, Jones, Barar, & Foster, 2014). Some states in the USA now require women to wait between 18 hours to three days or more (after undergoing pre-abortion counselling) before the abortion is carried out (Roberts, Turok, Belusa, Combellick, & Upadhyay, 2016). Policy makers argue that this rule gives women an opportunity to rethink their decision before the actual abortion is carried out. However, this regulation can increase the financial cost of abortion among predominantly low-income women and lead to more second trimester terminations (Roberts et al., 2016).

2.6.3 Cost

The cost associated with seeking abortions has been identified as a potential barrier to safe abortion (Gbagbo, 2020; Mundigo, 2006; Warriner, 2006). Studies show an association between the type of abortion a woman has access to and her financial position (Atakro et al., 2019). Women from poor economic backgrounds often resort to unsafe abortions which are cheaper, but associated with increased risk of complications (Ramashwar, 2013). It was observed that the least amount of money a womanin Egypt had to pay for a safe abortion ranged between US$60 to $150 (Lane, Madut Jok, & El- Mouelhy, 1998). This amount, authors argued, was beyond the reach of most poor women as it was more than the per capita monthly salary (Lane et al., 1998). Lane and colleagues further reported that women in such circumstances, still desirous of a safe termination, were reported to use various means of raising money for the procedure, including the sale of their jewellery, which resulted in terminations at higher gestations (Lane et al., 1998).

In another study on the cost of abortions to women in the US, the authors showed that most women seeking abortions were poor or had very low incomes (Jones & Kooistra, 2011; Jones, Upadhyay, & Weitz, 2013). They argued that although most had health insurance, their insurance often did not cover the cost of an abortion and out-of-pocket payment were needed. In Ghana, however, while women cannot access safe abortion care using their health insurance, the care for women who present with unsafe abortion is covered by health insurance (Payne et al., 2013).

Others observed that women undergoing first trimester abortions in the US had to pay on average US$397 and US$854 for a second trimester termination (Jones & Kooistra, 2011; Jones et al., 2013). This, the authors mentioned, was on top of additional costs incurred from transportation, loss of wages and childcare. Given the already precarious financial situation that most abortion patients find themselves in, raising money for all these payments could be difficult and prevent the termination (Jones, Finer, & Singh, 2010; Jones & Kooistra, 2011; Jones et al.,

2013). Along with prohibitive costs, stigma associated with having an abortion has also been found to act as a barrier to abortionand stopping some women from seeking care.

2.6.4 Abortion stigma

Abortion-related stigma is said to have negative consequences on both women and people involved in abortion provision (O'Donnell, Weitz, & Freedman, 2011; Shellenberg & Tsui, 2012). The negative impact has been found to transcend the physical health of people (to whom it is directed), to their mental health as well. Abortion related stigma is often categorised into either internal or perceived stigma (Shellenberg & Tsui, 2012). Kumar, Hessini, and Mitchell (2009) conceptualised abortion related stigma as a negative attribute ascribed to women who seek to terminate their pregnancies, thereby marking them as internally and externally inferior to the ideals of womanhood. Others argue that abortion related stigma is not only internal and external but has a social dimension as well (McMurtrie, Garc'ia, Wilson, Diaz-Olavarrieta, & Fawcett, 2012). Harris, Martin, Debbink, and Hassinger (2013) report instances where providers are both stigmatised by their colleagues as well as the women who seek their services. Also, the fear of being stigmatised may cause women to avoid public health facilities where they could get a safe termination, and instead use the services of clandestine providers, who are unsafe but might provide the needed secrecy (Izugbara, Egesa, & Okelo, 2015). Stigma silences the voices of women in claiming their rights to safe terminations, seeking quality post-abortion care and disclosing their experience to family and friends. It further fuels the perception that abortion is a deviant act (McMurtrie et al., 2012).

2.6.5 Conscientious objection

Conscientious objection allows health personnel the right to refuse a patient a service which they believe goes against their moral and religious inclinations but are obligated to refer the patient to a health facility where health care can be accessed (Harries et al., 2014; Shanawani, 2016). Religious beliefs, gestational age and women's reasons for seeking abortion can influence whether conscientious objection by health workers occurs (Awoonor-Williams et al., 2020). The use of conscientious objection has been found to stigmatise and deny women access to safe abortions to which they are legally entitled (Harries et al., 2014). Van Bogaert (2002) cautions against the unregulated use of conscientious objection especially in low- and middle-income context as it

endangers the lives of women. Van Bogaert (2002) argues that in high-income countries where there is a comparatively better access to care, women denied abortion through conscientious objection could use the services of another provider, however it is not so in low- and middle-income countries.

2.6.6 Limited number of providers

The limited number of people trained and willing to provide abortions has been reported as another barrier to safe abortion care (Clark et al., 2010; Jones & Kooistra, 2011). Research in the US highlights a decline in the number of physicians trained and willing to provide abortions, a situation which could hinder access to safe abortion care (Jones & Kooistra, 2011). A national study on abortion incidence and access to services in the US reported that 87% of county health facilities did not have an abortion provider (Jones & Kooistra, 2011). The study further reported that although 34% of health personnel in hospitals were trained in abortion provision, most provided abortions only during emergencies, as they accounted for only 4% of abortions. Most abortions were therefore left to specialised abortion clinics who were estimated to provide 70% of all abortions (Jones & Kooistra, 2011). In the African context, similar refusals by trained health workers to provide abortion have been reported in Ghana and South Africa (Clark et al., 2010; Harries et al., 2014; Harries et al., 2009).

Available evidence suggests the unwillingness of people to provide abortions despite training could be a way of protecting themselves and their families (Romalis, 2008). As observed by Romalis (2008), being an abortion provider can be quite stressful and dangerous. In a speech presented at the Morgentaler Symposium (the first person to establish a freestanding clinic offering safe abortion services in Canada), Romalis recounted several instances of attacks on both himself and his family for providing abortions (Romalis, 2008). In America, Dr George Tiller, a known abortion provider was murdered in 2009 in Kansas City (Jones & Kooistra, 2011). Moreover, according to Jerman and Jones (2014), about 80% of abortion clinic staff in the USA are exposed to various forms of harassment. It appears these negative provider experiences could unnerve physicians (who would have otherwise provided abortions), into refusing to do so or providing abortion under limited conditions. Therefore, to increase the number of global abortion providers, other health workers, termed midlevel providers have been trained to provide the service.

2.7 Mid-level providers

In the face of declining numbers of physicians willing to provide abortions globally, the shifting/sharing of the task of first trimester medication and post abortion care to mid-level providers has become a very important strategy in increasing access to safe abortion care and optimising health worker performance, as it relieves health care specialist like gynaecologists to provide more complex care (Berer, 2009; Dawson, Buchan, Duffield, Homer, & Wijewardena, 2013; Paul, Gemzell-Danielsson, Kiggundu, Namugenyi, & Klingberg-Allvin, 2014)

Mid-level abortion providers are midwives, nurses, physician assistants and clinical officers trained in post abortion care and first trimester abortion provision. Mid-level health workers are an important cadre of workers whose roles are growing in many aspects of health provision, in both low and high resource settings. Some attribute this to the small numbers of available physicians in low income countries and the higher cost of health provision by physicians in high income countries (Yarnall, Swica, & Winikoff, 2009) . Their inclusion is argued to be essential due to their greater numbers and the development of simpler ways of providing abortions like Manual Vacuum Aspiration (MVA) and medication abortion (Berer, 2009; Yarnall et al., 2009). The WHO's safe abortion guidelines recommended the provision of abortion services at primary health care level and argue that mid-level health workers can be trained to provide safe, first trimester abortions without compromisingthe health and safety of their patients (World Health Organisation, 2003). Even before this policy recommendation by the WHO, in some places like Vermont in the USA, Vietnam and South Africa, mid-level health care workers have been legalised to provide early trimester abortions since the early 90's. In other countries, like Mozambique and Cambodia, various training programs and legal reforms allowed the provision of first trimester abortions by mid-level providers (Berer, 2009). Studies comparing mid-level and physician provision of abortion in both developed and developing world contexts, found comparable levels of competence in the provision of first trimester abortions (Yarnall et al., 2009). A high level of interest by mid-level health workers to be trained and equipped to provide abortions have been reported elsewhere (Berer, 2009; Ganatra et al., 2017; Patel, Bennett, Halpern, Johnston, & Suchindran, 2009; Yarnall et al., 2009).

2.8 Hospital-based induced abortion procedures

Induced abortion, though contentious in some countries, has become a normalised component of women's health care over the past 40 years in most high resource and a few low- and middle-income countries (Lie et al., 2008). Induced abortion in health facility settings is often carried out through two main ways, namely, surgical and medical abortion. Surgical abortion is the use of transcervical operative procedures in ending pregnancies (Marie Stopes- Australia, 2019; World Health Organisation, 2012, 2015). It includes manual or electric vacuum aspiration which involves the use of gentle suction in evacuating the contents of the uterus. Manual and electric vacuum aspiration is often performed during the first 6-14 weeks of gestation (Marie Stopes-Australia, 2019; World Health Organisation, 2012, 2015). Surgical termination of first trimester pregnancies often lasts between 5 and 15 minutes and is normally performed under intravenous sedation (Marie Stopes- Australia, 2019; World Health Organisation, 2012)**.**

Medical abortion, on the other hand, involves the use of pharmacological drugs either vaginally or orally to terminate a pregnancy. Mifepristone and misoprostol are the two main abortifacients used (World Health Organisation, 2019). Mifepristone is administered orally followed by misoprostol, 24 to 48 hours later, sublingually. Mifepristone, which is also known as RU486, is an anti-progesterone which works by blocking the effects of that hormone which is required for pregnancy function. Misoprostol aids by opening the cervix and causing contractions to evacuate the uterus and bring about the abortion (Allen & O'Brien, 2009; Marie Stopes-Australia, 2019; Warriner, 2006; World Health Organisation, 2012).

Safe abortion technical guidelines outline the use of gestational age to guide the choice of an appropriate method of termination (World Health Organisation, 2012). The WHO policy guidelines recommend the use of vacuum aspiration and medication abortion for safe and effective first trimester terminations. Manual or electric vacuum aspiration is the preferred method of termination for pregnancies of 14 weeks gestation instead of D&C, due to the increased risk of complications associated with that method. In addition, medication abortion using oral mifepristone followed by a single dose of misoprostol is the recommended method of termination for early first trimester pregnancies, up to 9 weeks (World Health Organisation, 2012).

Apart from these two main methods of pregnancy termination, other methods of pregnancy termination include Very Early Medical Abortion (VEMA), Menstrual Regulation and Telemedicine abortion. VEMA is a relatively new method of pregnancy termination which allows women to have

an abortion as early as 1 day after they miss their periods or as soon as they are confirmed as pregnant. It can also be said to be an abortion performed in the presence of a positive HCG pregnancy test but with an empty uterine cavity (Cameron, 2018; Fiala et al., 2020). This method of termination is argued to have a 98% success rate, less painful, shorter bleeding time and before symptoms of pregnancy occur which reduces maternal bonding (Kirk et al., 2021).

Menstrual regulation, on the other hand is an important method of birth control in Bangladesh where abortion is illegal (Hossain et al., 2017; Sultana, 2020). Whiles any woman who misses her period up to 12 weeks is permitted by law to undergo menstrual regulation free of charge, induced abortion is only permitted at any gestational age to save the life of the woman (Sultana, 2020). Menstrual regulation is usually done without the woman undergoing a test to confirm her pregnancy status. It is defined as a procedure for regulating the menstrual cycle when menstruation is absent for a short time (Hossain et al., 2017; Sultana, 2020; World Health Organisation, 2011). The procedure is done with either manual vacuum aspiration or medical abortifacient (Bandewar, 1998). Finally, telemedicine abortion is a particularly useful means of pregnancy termination especially in areas where there are legal restrictions on abortion, in remote and underserved areas as it allows providers to treat women using medication abortifacient via telecommunications technology (Donovan, 2019; Endler et al., 2019).

2.9 African and Ghanaian Context: Contraception and induced abortions

Africa is one of the world's regions with the highest unmet need for contraception (Guttmacher Institute, 2017a). Experiences from other parts of the world show that the best way to reduce the number of women resorting to induced abortions is to increase access to effective contraception (United Nations, 2015c). Comparing the levels of contraceptive use in Africa and North America, it is estimated that only one fifth of married women in Africa use contraception against more than three quarters of married women in North America (Gyimah, Adjei, & Takyi, 2012). Examining the reasons for contraceptive non-use among African women, an early study by Bongaarts and Bruce (1995) reported that, the most prevalent reason for contraceptive non-use was a lack of knowledge about methods of contraception. In more recent studies, this reason has declined considerably (Sedgh, Ashford, et al., 2016). Currently, concerns about health risks, partner opposition and infrequent sex are important reasons for contraception non-use (Sedgh, Ashford, et al., 2016; Sedgh & Hussain, 2014). Others identified that the percentage of unmet need for

contraception among married women in Africa ranged between 12% in Egypt to 38% in Sao Tome and Principe. see Table 1.

Table 1: Percentage of women aged 15-49 years (by country of origin) with unmet need for contraception (2005-2015)

Country	Married (%)	Single (%)
Benin	33	18
Burkina Faso	25	9
Cameroun	24	11
Cote d'Ivoire	27	27
Uganda	34	10
Egypt	13	na
Ghana	36	14
Kenya	23	13
Nigeria	16	8
Sao Tome & Principe	38	11

Source: Sedgh, Ashford and Hussain, 2016

In Ghana, although knowledge of contraception by the sexually active is high, this has not resulted in increased contraception use (Ghana Statistical Service, Ghana Health Service, & ICF International, 2015). In 1988, the Ghana Demographic Health Survey (GDHS), a nationally representative survey, reported that 74% of sexually active Ghanaian women and 77% of currently married Ghanaian women knew of a modern method of contraception (Ghana Statistical Service - GSS & Institute for Resource Development/Macro Systems, 1989). Also, 60% of sexually active women and 70% of currently married women know where to purchase modern contraception for pregnancy prevention. However, only 5% report using a modern contraception at the time of the survey (Ghana Statistical Service et al., 2015). More than 20 years later, there is little change with high levels of contraception knowledge not being translated into contraception use. Contraception knowledge in Ghana is universal, but with only a 22% prevalence in the use of modern contraception by married women (Adampah, Angwa, Demuyakor, Achinkok, & Boah, 2020; Ghana Statistical Service - GSS, Ghana Health Service - GHS, & ICF International, 2015). In 2021, modern contraception use among Ghanaian women in unions is projected to increase to 31.1% (United Nations, Department of Economic and Social Affairs, & Population Division, 2020).

Comparing evidence from 1988 GDHS and 2014 GDHS in 1988 the pill, female sterilisation and foaming tablets were the most preferred methods of modern contraception in Ghana. In 2014,

the pill had lost its first place to injectables and implants and was now the third most preferred method of contraception by married Ghanaian women. Below is a table showing trends in current contraceptive use among Ghanaian women (Ghana Statistical Service et al., 2015). See Table 2.

Table 2: Percentage distribution of currently married Ghanaian women aged 15-49 years by current contraceptive method used (1988-2014)

Contraception method	1988 (%)	1993 (%)	1998 (%)	2003 (%)	2008 (%)	2014 (%)
Female sterilisation	1.0	0.9	1.3	1.9	1.6	1.9
Pill	1.8	3.2	3.9	5.5	4.7	4.7
IUD	0.5	0.9	0.7	0.9	0.2	0.8
Injectables	0.3	1.6	3.1	5.4	6.2	8.0
Implants	Unavailable	0.0	0.1	1.0	0.9	5.2
Male condom	O.3	2.2	2.7	3.1	2.4	1.2
Female Condom	Unavailable	Unavailable	Unavailable	0.1	0.1	0.0
Diaphragm/foam/jelly	1.3	1.2	0.9	0.5	0.3	0.0

Source: Ghana Demographic and Health Survey (GDHS)

A further look at the Ghana Demographic Health Survey (GDHS) 2014 rates of contraception among sexually active *unmarried* women reveals that condoms and the pill were the most preferred contraceptive method, followed by the few who use injectables and implants (Ghana Statistical Service et al., 2015). Comparing the use of natural means of contraception among married and unmarried Ghanaian women, higher use of natural contraception was found among the unmarried (Ghana Statistical Service et al., 2015). The use of natural means of contraception among unmarried women may be to hide their active sexuality, which is discouraged in Ghanaian society (Ghana Statistical Service et al., 2015).

Health concerns also feature prominently among reasons why Ghanaian women refuse to use or discontinue the use of contraception (Ghana Statistical Service et al., 2015; Ghana Statistical Service & Macro International Inc, 1994). In both the 1988 and 2014 GDHS, health concerns were the main reasons reported for refusal and discontinuation of modern contraceptive use. Spousal communication and education were, however, found to have a positive influence on contraception use among Ghanaian women. The 2014 GDHS further reported high unmet need for contraception among married and single women, at 35% and 20% respectively. A combination of these factors, researchers suggest, is responsible for 37% of all Ghanaian pregnancies being unintended, with the

possibility of being aborted (Ghana Statistical Service et al., 2015; Guttmacher Institute, 2013).

Prevalence and consequences of induced abortions in Africa

In Africa, current estimates show the annual incidence of induced abortions has increased from 5.6 million in 2003 to 8.2 million in 2014 (Singh et al., 2018; Singh, Wulf, Hussain, Bankole, & Sedgh, 2009). African abortions appear to be used more to delay births, as more occur among single, compared to married women. Rates of induced abortions among single women are estimated at 36 abortions per 1000 women, whereas for married women, the estimate is 27 abortions per 1000 women (Sedgh, Rossier, Kabore, Bankole, & Mikulich, 2011; Singh et al., 2018). Using multi-country nationally representative samples, Chae, Desai, Crowell, Sedgh, and Singh (2017) observed that over 50% of all African abortions occur among women within the ages of 20-29 years, despite this age group making up 40% of the population of reproductive aged women. Further, between 11% and 23% of abortions occur among women in their 30s and between only 1%-4% of women in their 40s. High rates of induced abortions were also observed among adolescent girls than other age groups, as a quarter of all abortions were estimated to have occurred among adolescents aged 15-19 years (Chae, Desai, Crowell, Sedgh, et al., 2017). Similar observations of higher rates of induced abortions among women in their 20s have been reported in other studies (Bankole, Singh, & Haas, 1999; Ghana Statistical Service et al., 2018; Singh et al., 2018). The situation calls for more concerted efforts at improving sexuality education among adolescents and making contraception more accessible to them (Silberschmidt & Rasch, 2001).

A look at the sub-regional abortion rates reveals variations across the continent. The highest rate of abortion is estimated among North African women, at 38 abortions per 1000 women, followed by Eastern and Southern African at rates of 34 abortions per 1000 women, and finally West Africa with a rate of 31 abortions per 1000 women (Singh et al., 2018; Singh, Wulf, et al., 2009). African women desiring to terminate their pregnancy have been found to rely on both safe and unsafe terminations. According to a study in Nigeria, 33% of Nigerian women used the services of physicians in ending their pregnancies, 35% consulted a chemist, 13% went to a nurse, 10 % a friend or partner and 6% used the services of a traditional healer (Guttmacher Institute, 2008).

Women undergoing abortions on the African continent have the highest risk of death than anywhere else in the world (World Health Organisation, 2020). Using the recent re-categorisation of unsafe abortions (less safe and least safe), most African abortions are terminated under the least safe conditions, that is untrained people providing abortions through dangerous means

(Ganatra et al., 2017; Guttmacher Institute, 2018a).

In Uganda, a hospital-based study attributed 21% of maternal deaths to complications from unsafely terminated abortions (Guttmacher Institute, 2008; Singh et al., 2013). Country-specific estimates suggest that between 12% and 13% of maternal deaths in Nigeria are related to unsafe abortions. While in Kenya, an average of 31% of maternal deaths are attributed to unsafe abortions (Marlow et al., 2014; Rasch, 2011). Country specific estimates indicate that unsafe abortion related complications are responsible for 25 % of all gynaecological admissions in Tanzania and one out of every three admissions to gynaecological wards in Kenya (Marlow et al., 2014).

Treatment of abortion-related complications puts financial strain on the health delivery system of many African countries that are already poorly resourced. Hospital treatment for abortion related complications uses a lot of resources, including hospital beds, blood products, medications, operating theatres, anaesthesia, nursing/midwifery and medical specialists (Singh & Maddow-Zimet, 2015; Vlassoff, Singh, & Onda, 2016). In Kenya, for instance, a national study on the financial cost of treating unsafe abortion revealed that in 2012, the treatment of unsafe abortion-related complications cost the national health system US$5.1 million. In 2016 there was an increase in this amount to US$6.3 million (Ministry of Health, African Population and Health Research Centre, & Ipas, 2018).

Other estimates suggests that on average, the cost incurred by African health facilities in treating patients with abortion related complications was US$83 per patient (Vlassoff, Walker, Shearer, Newlands, & Singh, 2009). The authors further observed that African health systems spent approximately US$171 million dollars in treating the complications of unsafe abortions. In the Sub-Saharan African region, the health costs of treating unsafe abortion-related complications is estimated to range between US$ 80 and 145 million per year (Vlassoff et al., 2009), which is a huge financial burden to already struggling health systems.

Induced abortion in Ghana

In Ghana, induced abortion is seen as immoral, improper and shameful (Bleek, 1978, 1981). The stigma associated with induced abortions is not just limited to women who undergo the procedure, but also to people who provide the service (Aniteye, O'Brien, & Mayhew, 2016; Bleek & Asante-Darko, 1986; Payne et al., 2013). Since Bleek (1981) conducted his seminal work on Ghanaian abortions and concluded that "abortion is reprehensible unless it is successful and

remains hidden" (p.203), not much has changed regarding societal attitudes towards abortion. Abortion is still highly stigmatised. Some suggest the important role of religion, the strong social sanctions against premarital sex and the high premium place on motherhood, as the root cause of this stigma (Payne et al., 2013). Ghanaian women desiring abortion have been quoted to experience familial and societal disapproval if found out (Lithur, 2004). Lithur (2004) argues that sometimes the shame of an abortion is extended to entire families, who are negatively labelled "families where its womenfolk remove pregnancy" (p.75). This label is derogatory and might have negative implications on the future marriage prospects of young women from that family. In a qualitative descriptive study in one Ghanaian region, the authors identified these social sanctions around abortions in Ghana as important reasons why women resort to unsafe abortion (Atakro et al., 2019).

Despite societal disapproval of abortion in Ghana, studies suggest high levels of knowledge on ways of terminating pregnancies. Bleek's (1981) study, for example, suggested that young Ghanaian men and women know more about ways of ending pregnancies than they do about contraception methods. Similarly high levels of knowledge about ways of terminating a pregnancy were found in the 2007 and the 2017 Ghana Maternal Health Surveys (Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018). Other studies have demonstrated that these high levels of knowledge about induced abortion have been translated into actual incidences of abortions, most often carried out under unsafe conditions (Baiden et al., 2006; Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018; Lee, Odoi, Opare-Addo, & Dassah, 2012). In Ahiadeke's (2001) study conducted in the southern part of Ghana (involving 1,689 pregnant women between the ages of 15 and 49 years and in several communities across 10 Ghanaian regions), out of every 100 pregnancies, 19 were aborted. Agyei, Biritwum, Ashitey, and Hill (2000) study among adolescents and young adults reported 47% of those who were sexually active had experienced an abortion. In a household based, cross-sectional study among teenagers in a Ghanaian district, 37% of sexually active females had ever had an induced abortion (Morhe, Tagbor, Ankobea, & Danso, 2012). Women using repeat abortions to prevent births were also reported (Adanu et al., 2005).

Comparing data from the 2007 and the 2017 GMHS, the proportion of pregnancies ending in abortions, had a slight increase from 15% (2007) to 20% (2017) (Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018). Similar patterns were observed with more urban pregnancies being terminated than rural (Ghana Statistical Service - GSS, Ghana Health Service -

GHS, & ICF, 2018; Nyarko & Potter, 2020). This could be due to the greater motivation of urban women not to let pregnancy interfere with their aspiration in life e.g., further study. The study further identified higher rates of induced abortion among women with primary school education, from rich households, women in co-habiting relationships, Christians and women who had sex before age 20 (Ghana Statistical Service, Ghana Health Service, & ICF International, 2018; Nyarko & Potter, 2020). In 2007, most Ghanaian abortions were predominantly among the younger aged cohorts and declined as wome(Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018). In 2017, however, higher rates of abortions were recorded among the older age cohorts. The outcome of these studies highlights high rates of abortion and the need to find ways of increasing the uptake of contraception among Ghanaian women (Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018)**.**

Ghana's maternal mortality rate has seen a reduction in the previous estimate of 451 per 100,000 live births in 2008, to 310 per 100,000 live births in 2018 (Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018). Though this reduction is commendable, it is still considerably higher than the average for most countries in low- and middle-income settings, at240 per 100,000 live births. Various rates of unsafe abortions have been estimated to contribute to Ghanaian maternal deaths. Some studies present unsafe abortion-related deaths as the second most important contributor to the Ghanaian maternal mortality rate, others argue that it contributes between 20% - 30% of all maternal deaths in the major referral health facilities in the country (Der et al., 2013; Ghana Health Service, 2004; Ghana Statistical Service - GSS et al., 2009; Ghana Statistical Service et al., 2018; World Health Organisation, 2012). Despite the variations, one common thread through all these studies is the important link between unsafe abortions and deaths of Ghanaian women (Der et al., 2013; Gumanga et al., 2011). Unsafe abortion also significantly contributes to adolescent deaths (Ohene, Tettey, & Kumoji, 2011).

Ghanaian research on abortion has recorded large numbers of abortion-related complications in the form of haemorrhage, infections and poisoning from some of the toxic substances ingested by women wishing to end their pregnancies (Baiden et al., 2006; Guttmacher Institute, 2010; Lassey, 1995; Payne et al., 2013; World Health Organisation, 2012).

In addition, the Ghanaian media is inundated with reports of the activities of male illegal abortion providers and women who, due to poverty and gender inequity, suffer from the consequences of unsafe abortions. The following media examples are provided:

A circuit court has jailed a quack abortion doctor. The convict, was arrested while about to

terminate another pregnancy on January 9, 2021 after conducting botched abortions the previous days leading to serious complications resulting in the transfer of victims from the government to the regional hospital (12th January 2021, www.Starrfm.com.gh).

A 58-year-old man who is a hospital cleaner was arrested for carrying out illegal abortions upon a tip off (21st June 2019, www.starfmonline.com.gh).

A quack medical practitioner was arrested by the police for performing an illegal abortion on a 17-year-old student. The victim's condition worsened after the illegal abortion and she was rushed to the hospital for proper medical attention (27th August 2018, www.graphic.com.gh).

Media reports include women who undergo abortions being sexually violated by illegal abortion providers:

A 41-year-old man … has been arrested by police for performing illegal abortions, and raping patients in the process. The suspect was apprehended by the Police after his latest victim, a 21-year-old lady in a suburb of Accra reported being raped when she went for an abortion (19th May 2017, www.classfmonline.com.gh)

Others reports include women dying in their desperation to abort their pregnancies:

A nineteen-year-old female student of a Senior High Technical School in the Central region has died after she attempted to abort a seven-month-old pregnancy using medicine provided by her boyfriend (28th September 2017, www.Starrfm.com.gh)

Reports also indicate the hypocrisy of some religious leaders, who despite preaching against abortion, compel women they impregnate to undergo unsafe abortions, which sometimes leads totheir deaths:

A 21-year-old woman died after attempting to abort her pregnancy using the services of a quack doctor. The deceased impregnated by her pastor was 3 months pregnant at the time of the abortion. In addition to being administered injections by the quack doctor, the pastor gave her a concoction of salt mixed with paracetamol to facilitate the abortion. She died from septic shock whiles undergoing treatment at the hospital (12th February 2019, www.starfmonline.com.gh).

Methods of abortion used by Ghanaian women

A study undertaken in three Ghanaian regions (with high prevalence of induced abortions) on the readiness of health facilities to offer comprehensive abortion and contraception services reported fewer than one in seven public health facilities admitting to offering induced abortion (Aboagye et al., 2007). Therefore, most Ghanaian women still rely on a mix of traditional practitioners, quack doctors, physicians and other sources such as qualified nurses and pharmacists to obtain abortions (Ahiadeke, 2002; Ghana Statistical Service - GSS et al., 2009; Ghana Statistical

Service et al., 2018). An earlier study (Bleek, 1981) observed that Ghanaian pregnancies were ended through three main ways, namely modern, herbal and miscellaneous or home remedy. Modern means of terminating pregnancies involve surgical abortions from both qualified and unqualified health professionals, as well as an overdose of drugs with abortive properties from chemist shops (Bleek, 1981). Herbal abortions are procured by using various plants administered orally, vaginally and through the anal passage, whereas miscellaneous abortions are conducted by ingesting washing blue, sweet drinks and physical exhaustion.

In a retrospective study involving 1370 participants sampled from two Ghanaian districts, the two most common methods found to have been used by the study participants in ending their abortions were herbal abortifacients and D&C (Ganle, Obeng, Yeboah, Tagoe-Darko, & Mensah, 2016). Currently, the use of medication abortion has become a very popular option for women desiring induced abortions despite it being illegal. According to the nationally representative Ghana Maternal Health Survey, the use of medication abortion (less than 10% in the 2007 survey), has increased to 38% in 2017 (Ghana Statistical Service et al., 2018). Despite the significant numbers of Ghanaian women who access abortions outside the formal health delivery system, there is limited evidence of people who provide these abortions in the Ghanaian abortion literature.

Post abortion care in Ghana

The willingness of a woman to seek medical care and the promptness with which she receives care after reporting to a health facility with an abortion-related complication, could influence whether she dies, lives or survives the experience with lifelong health challenges (World Health Organisation & Department of Reproductive Health and Research, 2007). Studies have reported on the large numbers of Ghanaian health workers who take part in seminars and training programs on the provision of safe abortions, but refuse to provide the service (Clark et al., 2010). Clark and colleagues (2010) found physicians are more willing to provide abortions after receiving training than midwives. Their study identified 80% of physicians as providing abortions compared to 20% of midwives, after receiving training. This, the authors suggest, is challenging considering the greater availability and wider distribution of midwives compared to physicians. Other studies report on the poor treatment given to women presenting with abortion related complications. Schwandt et. al (2013) and Tagoe-Darko (2013) report the poor quality of post-abortion care at Komfo Anokye Teaching Hospital (KATH), which is the second largest tertiary health facility in

Ghana. These studies suggest that Post Abortion Care (PAC) is often not a priority for attending physicians, as women who present with induced abortion related complications are not prioritised and are often seen after all other patients have been given care (Schwandt et al., 2013; Tagoe-Darko, 2013).

2.10 Informal abortion provision

Women aborting their pregnancies outside hospital settings have been found to use both medical and herbal abortifacients.

Pharmacies and induced abortion

Pharmacies play an important role in health care provision in many low resource settings (Azhar et al., 2009). The cost of their services, locations within walking distances to where clients live and their ability to provide client anonymity, often make them the first point of health care for people facing health challenges, including women seeking to terminate a pregnancy (Azhar et al., 2009; Pick, Givuadan, Izazaga, & Collado, 2003 ; Reiss, Footman, Akora, Liambila, & Ngo, 2016a; Sneeringer, Billings, Ganatra, & Baird, 2012). Unlike some high resource settings like Australia and some provinces in Canada, where the distribution of medication abortifacients in community pharmacies is regulated, it is not so in many low resource settings (Raifman, Orlando, Rafie, & Grossman, 2018). In Brazil, for instance, reports indicate that as many as 250,000 women ended their pregnancies using misoprostol which they purchased without prescriptions from pharmacy shops (Brooke, 1993 cited in Pick et.al. 2003). Other studies suggest that in India, 73% of the estimated number of yearly abortions are terminated outside the formal health delivery system, with abortifacients purchased from pharmacy shops (Diamond-Smith, Percher, Saxena, Dwivedi, & Srivastava, 2019). Over the counter sales of medication abortifacients is also common in Ghana. A cross sectional study conducted in the second largest Ghanaian teaching hospital, with 252 women reported, about 60% of participants using this medication to abort their pregnancies (Damalie et al.,2014).

Nevertheless, qualified pharmacists with the training to safely dispense these medications to women are not always available in the pharmacy shops, thereby leaving the job to other categories of pharmacy workers, some of whom do not have adequate training and knowledge to safely dispense the medications (Footman et al., 2018; Sneeringer et al., 2012). Instances of clients being

given either misinformation, inadequate information or no information on the dosage and side effects of medications used in terminating pregnancies is also common (Diamond-Smith et al., 2019; Reiss et al., 2016a; Samari, Puri, Cohen, Blum, & Rocca, 2018). In Ghana, a few studies report the unsupervised use of medication abortifacients, resulting in unsafe abortions and various kinds of morbidities among users (Appiah-Agyekum, 2014; Damalie et al., 2014).

Traditional/ herbal medicine and induced abortions

Herbal medicine is often rooted in the culture and the ways of life of a people and its practitioners use various plant parts or plant derived substances in treating, preventing and maintaining health (Tilburt & Kaptchuk, 2008; World Health Organisation, 1998). Within this context, herbal and traditional medicines are used interchangeably. Herbal medicine practitioners often acquire their skills either informally through assisting family members who are practitioners or learn the trade from experienced others (Mokgobi, 2014). Traditional medicine practitioners are an important source of health care, meeting various health care needs including those associated with the reproductive health care needs of women. Their services are often used by those who, due to low finances, traditional belief systems and issues related with access, are unable to use modern health care (Aborigo, Allotey, & Reidpath, 2015; Mokgobi, 2014; Tabi, Powell, & Hodnicki, 2006).

Herbal medicine practitioners play an important role in the provision of induced abortion care for women. In a national study on induced abortions in Mexico City, Pick et al. (2003) reported the use of herbal abortifacients by some 36% of women who sought treatment for complications they suffered in the largest hospital in the city. Interviews with Mexican herbal medicine practitioners found that the two most common herbs they often prescribed to clients were Zoapatle *(Montanoa tomentosa) and* Ruda *(ruta graveolens),* which are known to have abortive properties (Pick et al., 2003).

In another study on the use of herbal abortifacients in Ghana, some plants such as the stalk of the Jatropha plant (*jatropha curcas),* the dried stalk of Commelina (*commelina communis),* Acheampong leaves *(chromolaena odorata)* and Mahogany leaves (*khaya senegalensis)* were found to have been used in aborting pregnancies (Anarfi, 2003; Bleek & Asante-Darko, 1986). In Nigeria, plants like Madaci (*khaya senegalensis),* African peach or nauclea latifolia (*sarcocephalus esculentus)* and Henna (*lawsonia inermis)* have been used by some women in aborting pregnancies (Renne, 2003).

2.11 Summary

There is an extensive body of evidence on induced abortion within the global, African and Ghanaian context. Induced abortion was demonstrated to be a problem of women in mainly low resource settings, with far reaching consequences on not only the women, but on her family, the society and the already over stretched health systems of her country. Unmet need for contraception among women in low resource settings and its link to induced abortions was also illustrated. In reviewing laws governing abortions globally, the abortion laws in high resource settings are generally more liberal than those in low resource settings. These restrictive laws were sometimes found to act as a barrier preventing women from accessing safe abortion care. In Ghana, despite policy reforms to reduce the incidence and impact of unsafe abortion on women, abortion significantly contributes to maternal mortality and morbidity as women mainly seek informal abortions outside the health care system. This notwithstanding, there is limited evidence about informal abortion provision in the Ghanaian abortion literature. The next chapter (3) outlines the research approach and methods used.

Chapter 3: Research approach and methods

This chapter describes the research approach and methods employed in the study. First, I present the rationale for the choice of a mixed methods approach and its underlying research paradigms. I then describe a range of theories and ethical considerations which informed this study. This is followed by a presentation of the methods of sampling, recruitment, data collection and analysis. I conclude the chapter with how I ensured the trustworthiness of the findings, given the greater emphasis on the qualitative strand of this mixed methods study.

3.1 Mixed methods research

Ghanaian studies on induced abortion have mainly presented evidence from the perspectives of women and less from service providers, using either quantitative or qualitative research methodologies (Gayanglo & Hill, 2012; Gbagbo, Amo-Adjei, & Laar, 2015; Mote et al., 2010). However, to ensure a thorough understanding of induced abortion and its associated challenges, combining quantitative and qualitative research approaches in studying the problem from the views of not just women, but people involved in providing abortions, is vital. Employing a mixed methods research approach, I used interviews to explore the knowledge, attitude and practices of abortion service providers and the abortion seeking experiences of women. I also conducted a quantitative analysis of the medical records of post abortion women for purposes of describing their socio-demographic characteristics and reproductive health choices.

Whereas the focus of quantitative and qualitative research is on either gathering, analysing and making inferences from only numerical or narrative data, mixed methods research combines both (Creswell, 2015; Creswell & Plano-Clark, 2011; Teddlie & Tashakkori 2009). Qualitative research is said to have the strength of providing detailed perspectives of the views of research participants in their own language. Quantitative research, on the other hand, tends to involve large numbers of study participants and, therefore, findings can be generalised, but is argued to be largely researcher driven and impersonal as the voices of study participants are not prioritised

(Creswell, 2015; Curry & Nunez-Smith 2015; Creswell & Plano-Clark, 2011; Teddlie & Tashakkori 2009).

According to Teddlie and Tashakkori (2009), mixed methods research draws on both quantitative and qualitative research approaches in answering the questions associated with a study. Johnson, Onwuegbuzie and Turner (2007) described mixed methods research as 'the type of research in which a researcher or team of researchers combines elements of quantitative and qualitative research approaches for the purposes of breadth and depth of understanding and corroboration' (p.123). Creswell and Plano-Clark (2011) argue that mixed methods research involves philosophical assumptions which allow for the combination of both quantitative and qualitative research approaches in a single study, to generate a more nuanced understanding of the phenomenon under study, compared with a single approach.

3.1.1 Research paradigms

Research paradigms are a set of assumptions or 'worldviews' guiding the conduct of research (Mertens, 2003 cited in Teddlie and Tashakkori, 2009). This mixed methods study is situated within the pragmatic research paradigm**,** which argues against using single research approaches during a study, claiming they do not ensure a thorough analysis of the research problem. Pragmatists instead advocate for a combination of quantitative and qualitative research approaches for the purposes of complementarity and corroboration (Creswell, Fetters, & Ivankova, 2004). The pragmatic research paradigm further stresses the primacy of the research problem; pragmatists are urged to use whatever quantitative and qualitative approaches would ensure a thorough and a complete analysis of their research question or phenomenon being studied (Johnson & Onwuegbuzie, 2004). Biesta (2010) sees pragmatism as breaking down the divisions between quantitative and qualitative research since it identifies and utilises the strengths of both approaches in answering research questions, such that the ensuing knowledge is socially useful (Teddlie & Tashakkori, 2009). Situating this study within the pragmatic research paradigm enabled a multi-perspective exploration of the phenomenon and research question under study, using qualitative and quantitative methods of data collection, analysis, and a range of theories. It is therefore anticipated that the findings of this research would make a substantial contribution to knowledge creation in Ghanaian abortion research.

3.1.2 Research designs

Research designs are the procedures for collecting, analysing, interpreting and reporting the outcomes of research (Creswell & Plano Clark, 2011). Fundamental research designs associated with mixed methods research include sequential and convergent or parallel designs (Creswell, 2015). This doctoral study on unsafe abortion involved a convergent mixed methods design. In convergent mixed methods design, qualitative and quantitative data are gathered simultaneously. The qualitative and quantitative components are then analysed separately after which study results are integrated during the process of data interpretation to provide multiple perspectives, and a more comprehensive and in-depth understanding of the research problem, than only qualitative or quantitative approach would have allowed. This design allows for timely completion of research. Data from the qualitative and quantitative strands of the research can be used for the purposes of validating each other (Creswell, 2015; Curry & Nunez-Smith 2015; Creswell & Plano-Clark, 2011; Teddlie & Tashakkori 2009).

In contrast, sequential designs directly follow on from each other, are often time and resource intensive (Shorten & Smith, 2017) and can either be explanatory or exploratory. In explanatory sequential designs, quantitative data are gathered first, followed by qualitative, which explains the quantitative data previously collected. Whereas in exploratory sequential designs, qualitative data is gathered initially and then quantitative data, with the qualitative data informing the collection of the quantitative data (Creswell & Plano-Clark, 2011).

A convergent mixed methods design was found suitable for this study as it allowed a simultaneous gathering of qualitative interviews and quantitative chart audit data, which was essential given the time limitations of the Ghanaian field work.

3.2 Philosophical and theoretical models

This section presents the philosophy and theories informing the research design and interpretation of study findings; they include feminist and stigma theory and the ecological model.

3.2.1 Feminist theory

Feminist theories focus on the unequal power distribution between women and men in all spheres of life and seek to fight against these inequities and injustices, so that a more just and fair society would be created (Hesse-Biber, 2010; Reinharz & Davidman, 1992). Kelly, Burton, and Regan (1994) speak of feminism as a practice, theory and a framework which focuses on studying ways in which women are oppressed and how to end this domination. Hesse-Biber (2010), however, adds that feminism does not only focus on the rights of women but other oppressed and marginalised groups. She further states that research guided by feminist ideas address issues which border on power, difference, silence and oppression.

Feminist approaches advocate for the use of any method which would best answer the research question and enhance an understanding of the multiple realities of study participants. Another interest of research with feminist undertones is the exploration and giving of a voice to subjugated knowledge (Hesse-Biber, 2010; Reinharz & Davidman, 1992). Feminist theory is therefore used in this study to highlight gender inequality and interpret power relations between women seeking abortion and their partners/providers.

3.2.2 Stigma theory

According to Erving Goffman (1963), stigma is an undesirable difference or attribute possessed by an individual which is considered socially discrediting. People possessing such stigmatised attributes are often devalued, tainted and regarded negatively by society. Similarly, Stafford and Scot (1986), defined stigma as characteristics possessed by people that are contrary to the norm of a social unit. Crocker et.al. (1998) suggest that stigmatised individuals possess characteristics that are devalued in a social context. In the field of abortion study, stigma is conceptualised with a focus on women (Kumar et al., 2009). Kumar et al. (2009) define abortion-related stigma as the negative attribute which marks women seeking abortions as inferior to the ideals of womanhood.

Stigma has been identified to manifest in three ways; namely, enacted (external), felt or perceived and internalised (internal) (Herek, 2007). Enacted stigma occurs when clear acts of discrimination like avoiding, shunning, labelling and stereotyping are directed to a person due to his or her stigmatised status. Felt or perceived stigma refers to an individual's anticipation that he or she could be stigmatised in certain situations and modifies their behaviour accordingly (Herek,

2007). Internal stigma occurs when people who are likely to be stigmatised, adopt society's stigmatising behaviour towards them and play it out as their own (Herek, 2007). Abortion related stigma has been identified to affect both women and abortion providers (Norris et al., 2011). Within the context of this study, enacted and felt or perceived stigma are considered.

3.2.3 Ecological model

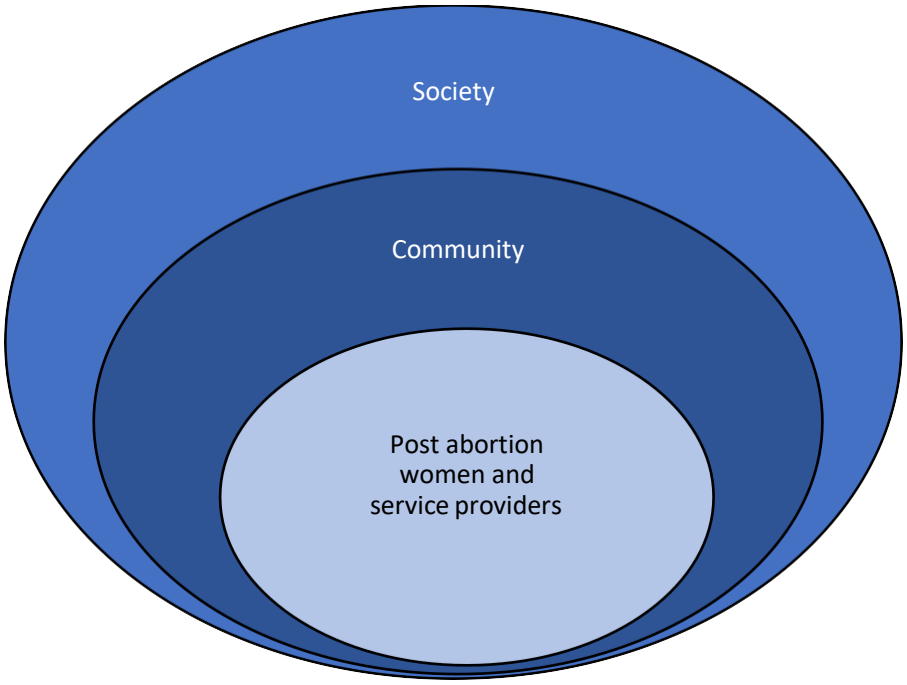
Since the social context influences attitudes to abortion and practices of both women desiring abortions and people involved in abortion provision, understanding how these influences played out among study participants was important. In this light, I found the ecological model a suitable framework to draw on during several stages of my project including-when designing data collection tools and interview questions for the study, data gathering, analysis and interpretation of the study outcomes. The ecological model was developed by Urie Bronfenbrenner (Bronfenbrenner, 1992) to explain child development and its core concept is that behaviour is affected by multiple levels of influences. Bronfenbrenner (1992) conceptualised these influences on behaviour into microsystem, mesosystem, exosystem and macrosystem levels. He argued that the individual was nested within these systems, which continuously interacted and influenced each other. According to Bronfenbrenner, the microsystem referred to influences from settings where the individual has very close contacts, like one's family and social networks. The mesosystem is the interaction between the various microsystems that the individual is involved in. The exosystem level of influence comes from the larger social system within which the individual is embedded, whereas the macrosystem level of influence refers to broader cultural beliefs and values (Bronfenbrenner, 1992).

Bronfenbrenner's model has been adapted and applied in various fields of study including public health (McLeroy, Bibeau, Steckler, & Glanz, 1988; Stokols, 1996) and gender-based violence research (Heise, 1998). Sallis, Owen, and Fisher (2008) argue that the use of ecological models in studying health behaviours provides a comprehensive framework which helps in providing a more nuanced understanding of the varying influences on health behaviour.

Within the context of this study, I adapted the widely used Krug et al.'s (2002) versionof the ecological model. I conceptualised behaviour as influenced by individual, community and societal level factors. At the individual level, I explored how individual women and providers

abortion-related experiences were influenced by their personal characteristics and social networks. The community level factors considered how community norms impacted the abortion experiences of women and providers. Finally, at the societal level, the role of public or governmental policies in influencing the abortion experiences of women and providers who participated in this study were explored (Figure 1).

Figure 1: Ecological model



Source: Adapted from Krug et al. (2002)

3.3 Qualitative data

The following discussion explains how I gathered qualitative data for the study, including recruitment of women who had undergone an unsafe induced abortion and were seeking subsequent hospital care and formal (doctors) and informal (pharmacists/herb sellers) abortion providers.

Recruitment

Recruitment of study participants occurred between June 2017 and March 2018. Women aged between 18-49 years who sought care for unsafe abortion complications at participating hospitals were eligible for the study. The eligibility criteria for both formal and informal abortion providers were their involvement in abortion provision. I first discuss recruitment of women and formal abortion providers at hospitals and then move on to informal abortion provider recruitment.

Hospital based recruitment

Women and formal healthcare providers were recruited from two district hospitals and a regional hospital in the study area. These study sites were selected as they had obstetrics and gynaecology units and also accepted referred cases across the study area. Women within the ages of 18-49 years who had sought post abortion care after experiencing unsafe abortion complications and hospital staff providing abortions were recruited for the study. To recruit women, I placed study advertisements on notice boards and at vantage locations within the study sites *(*Appendix B-Notice inviting participants**).** I also left advertising materials with the health care providers as there was the possibility of some women missing out on the notices. I was notified by the health care providers if women agreed to participate, I then followed up to conduct the individual interviews. The process of recruiting women enhanced rapport between the hospital staff and me as a researcher. This later facilitated the enrolment of hospital staff for the study. I contacted providers among the hospital staff providing abortions, who met the inclusion criteria at the study sites and followed up to conduct interviews with them. Figure 2 is a picture of one of the hospital study sites where I recruited participants for the study.

Figure 2: Hospital ward

Source: Field work data, 2017

Informal providers

The recruitment of informal abortion providers was very challenging as their activities are not only illegal but also stigmatised (Lee, 1993). I therefore employed various recruitment strategies (including snowball sampling) in enrolling them for the study. I started the recruitment drive by securing information on their places of operation. Armed with this information, I approached and personally advertised the study to potential participants at their places of work. For instance, in my recruitment drive with pharmacy workers, when I attended a pharmacy shop, I approached the person behind the counter to advertise the study. Using this recruitment drive, however, resulted in my failure to enrol any of the informal providers for the study. After weeks of not being able to recruit participants through this method, together with my field work supervisor, we decided to seek the assistance of a key informant to facilitate the recruitment process. As emphasised by Biernacki and Waldorf (1981), key informants or trusted community members are a very important resource in facilitating the enrolment of study participants for sensitive studies.

With the key informant on board, I re-started the recruitment drive among pharmacy workers using snowballing methods. After an interview with a pharmacy worker, I asked whether

they knew of other colleagues who might be interested in taking part in the study. I further left some of the study materials with them so they could give it to friends who might express interest.

Figure 3: Pharmacy shop

Source: Field work data, 2017

Key informants were similarly used in the process to recruit the herb sellers. After each interview I left some of the study materials and my contact details to be given to their colleagues who might be interested in participating in the study. I later followed up and recruited participants for the study through that snowballing process.

Figure 4: A herb seller's wares

Source: Field work data, 2017

Interviewing

I employed semi-structured (thematic) interviews to gain full understanding of induced abortion from the perspectives of study participants because it follows an open-ended approach enabling more discussion rather than answering of direct closed questions (Brinkmann, 2013; Kvale & Brinkmann, 2009). All the interviews were conducted mainly in Twi, the local language (Entwisle & Kozyreva, 1997). I realised that the use of the local language improved rapport and further led to better articulation of participants experiences and thoughts. Firstly, I discuss the interviews conducted in hospitals with both women and formal abortion providers and then that of the informal providers.

Interviews with women

Participation in this study did not in any way influence the care of participants, as data were collected from only women who had recovered from an unsafe abortion and were being discharged from hospital. Of the 24 women who consented to take part in this study, 15 gave consent for their interviews to be audiotaped, whereas nine refused despite assurances of the

purpose for which the interview was going to be used. When study participants did not consent to their voices being recorded, I took notes of the issues raised during the interviews and later made a written record of the discussion as soon as I was at a convenient location, after the interviews. All the women who participated in this study gave both verbal and written consent to participate in the study before being interviewed.

To open the interviews and build rapport, I always started with generic issues usually related to some interesting happening in the community or nation (not included in my attached interview schedule), then moved to issues about their social and demographic characteristics before delving into questions about their sexuality, reproductive health and induced abortion related experiences, which are considered private. Interview questions included the induced abortion related experiences of participants, methods used in aborting their pregnancies, the kinds of complications they suffered, the abortion providers they sought services from, and some actions taken when they experienced complications from their abortions (Appendix C- Interview guide for women). I reminded them of the voluntary nature of participation and their right to halt or discontinue the interview at any time. Although some of the participants exhibited embarrassment during the interviews, they all chose to continue. At the end of the interviews, I debriefed with all the participants and provided them with information about support services. On average the interviews lasted between 30 minutes to an hour and after each interview, I documented how the interview proceeded and ways of making the next interview better.

Interviews with formal abortion providers

Guided by a semi-structured interview schedule (Appendix D- Interview guide for formal providers), I conducted 10 interviews with hospital staff involved in abortion provision. Formal abortion providers interviewed included: six midwives, two general practitioners, one physician assistant and a gynaecologist. All provider interviews were face to face and occurred in a private area at the hospital where they worked, after their shift. In addition, all the provider interviews were predominantly conducted in Twi (language spoken in the study area). Although the providers had already given initial verbal consent to participate, they also provided written, informed consent.

Formal abortion providers were also made aware of their right to withdraw from participation or refuse to answer questions they were uncomfortable with. I also asked their permission to audio tape the interviews. Of the 10 providers, six declined to give their consent for their interviews to be audio recorded. Like the women who declined consent to recording of their interviews, I took notes of what transpired during the interviews. Interview questions were on provider training in provision of safe abortions, methods of abortion often provided, reasons for becoming abortion providers and the cost of their services. On average, interviews with formal abortion providers lasted between 45 minutes to an hour.

Interviews with pharmacy workers

Eight pharmacy workers took part in this study; they included two pharmacists, three dispensing technicians, two people who learnt on the job and therefore had no formal pharmacy training and a medicine counter assistant. Interviews with the pharmacy workers were all conducted at their place of work during off peak periods, in the early mornings and afternoons. Apart from one interview which the participant arranged when he was on night duty at a hospital, all the interviews were conducted during the day.

Due to the illegal nature and stigma associated with their activities, considerable time was spent in trying to discuss interesting issues with the participants (not outlined in the attached schedule) before delving into questions on abortion. The time of data collection was during the champions league and most Ghanaian young men are really into football. I therefore made a conscious effort with the help of my husband, to watch some of these games and learn the names of the players, so that I could use it as one of the means of building rapport. Also, during the process of interviewing, I was very attentive to the verbal and non-verbal cues that they presented. The questions on the interview schedule were not followed in a sequential order but were based on the flow of the discussion and the verbal and non-verbal cues received during interviewing. Issues discussed during interviews focussed on their training, characteristics of their clients, attitudes towards clients, their access to abortifacients and information given to clients on the safe use of the abortifacients (Appendix E-Interview guide for pharmacy workers). The average length of interviews for the pharmacy workers was between 50 minutes and an hour and a half.

Interviews with herb sellers

Five herb sellers who operated within various community markets were also interviewed for the study. I started herb seller interviews with efforts at rapport building. Rapport building started with discussions on the various herbal preparations sold and their uses. I then moved on to their sale of aphrodisiacs (which can be found among the wares of most herb sellers in Ghana), before delving into the use of herbal preparations for aborting pregnancies. During interviews with herb sellers,' questions on their training and herbal abortifacients were explored. I also asked questions about their knowledge of the law, views about women who seek their services, reasons for providing abortions and the cost of services (Appendix F- Interview guide for herb sellers).

Qualitative data analysis

Qualitative data analysis as described by Dey (1993), aims at providing fresh insights into the phenomenon being studied. This, he argued, is achieved through an in-depth description and categorisation of data through the assignment of codes, themes and an identification of the links between the data for onward interpretation. Miles and Huberman (1994), on the other hand, viewed qualitative data analysis as a continuous process, involving various stages like reduction of data, displaying, drawing conclusions and then, finally verifying the data. Whereas Coffey and Atkinson (1996) described qualitative analysis as a reflexive process involving the use of systematic procedures in finding the essential features and relationships within data. I describe the iterative methods I chose below.

Analysing interview data

Analysis of interview data was driven by the research questions and theoretical frameworks. All 47 interviews conducted in the study, were translated from Twi to English and transcribed by me. Though personally transcribing all the interviews was time consuming, it was very useful in helping to capture the silences, as well as picture the scenes which occurred during the interview process. While Pope, Zeibland, and Mays (2008) mention the importance of verbatim transcription

of interviews, this might not be practical in all situations, especially when translating interviews from one language to another. In this study, there were situations where verbatim translation of some words from Twi into English made those words lose their meaning. However, by personally transcribing all the interviews, I was able to picture and better present the context surrounding the use of those words, such that their meanings were not lost. Besides, by transcribing all the interviews personally, the intimacy between myself and the data were enhanced (Saldaña, 2011). As Easton, McComish, and Greenberg (2000) argue, ideally interviews should be transcribed by the interviewer to prevent some challenges like language barriers and misrepresentation.

Qualitative data analysis of interview transcripts involved an inductive coding process (Thomas, 2006). After transcribing the interviews of all study participants, I read and re-read the interview transcripts to gain an understanding of the underlying factors informing their abortions and the patterns within the data. I then identified significant statements or recurrent issues in the transcripts to form the initial codes. Due to the inductive nature of the analysis (Thomas, 2006), the codes were derived from the interview transcripts, rather than deductively at the formative stage of the research. From the initial codes, similar codes were identified and brought together. The codes were then clustered into patterns or categories and similar categories were themed. A coding frame was then developed for onward coding of the remaining data, using NVivo 11 (Bazeley & Jackson, 2013). Having analysed all the interviews for the women, I moved on to the abortion providers (hospital staff, pharmacists and herb sellers) interview data. A similar process as above was applied to the interview transcripts of the abortion providers.

During the analysis of the women's interview data, I discovered women's reports of the various delays emerging in their narratives about their induced abortion related experiences. Although the three delays model (Thaddeus & Maine, 1994) is mainly used in explaining the causes of pregnancy related maternal mortality, I found the model useful in explaining women's abortion experiences in that induced abortion-related deaths have been identified to contribute significantly to maternal deaths. I discuss the three delays model and its applicability to this study in the next section (refer to Appendix A).

The three delays model

The three delays model is a conceptual model for examining the causes of maternal mortality (Thaddeus & Maine, 1994). It argues that delays experienced by pregnant women in receiving timely medical intervention is the cause of most maternal deaths. The model conceptualises these delays as the following:

Delay 1. deciding to seek medical care

Delay 2. reaching a health facility where they can access the needed care

Delay 3. time spent at the health facility before receiving adequate and appropriate care

This theoretical model and its relationship to the data for unsafe abortion emerged during the data analysis and is fully described in Chapter 4 (4.11), Chapter 8, and Appendix A.

3.4 Quantitative data

The following section explains the methods of gathering and analysing health service quantitative data. I first start with a presentation on sampling.

Chart audit sampling

Twelve months of medical health record data extracted from abortion client records in an NGO operated hospital in 2017 constituted the quantitative strand of this study *(*Appendix G-Data extraction form). Before the start of field work, I had planned on sampling from only public hospitals. This decision was partly influenced by my use of study samples from a non-governmental run hospital during my Master of Philosophy thesis. At the start of field work however, I realised that the available medical health record data on induced abortion at the selected hospital study sites, were very minimal and inadequate for statistical analysis. I therefore included a non-governmental organisation hospital that focused on sexual and reproductive health, as they had very detailed client medical records on induced abortions.

I used purposive sampling, in that my interest was in recruiting women with certain characteristics (undergone induced abortions). I extracted the total population of women in the

abortion client record books between January and December 2017, provided they met the inclusion criteria. The inclusion criteria for the health record data included women who had sought abortion care at the study site and who were aged between the ages of 18 and 49 years, in order to match the ages of women who were interviewed.

Quantitative data analysis

Data gathered by someone other than the original researcher and for reasons outside its original purpose, are described as secondary data. Using patient health records for purposes other than the provision of health care is also said to be secondary use of data (Safran et al., 2007; Tashakkori & Teddlie, 2003).The use of secondary data has many advantages, including the ease with which it can be gathered, and the comparatively shorter time spent in analysing it, unlike primary data. It may also include large sample sizes that could enable the generalisation of research findings (Safran et al., 2007; Tashakkori & Teddlie, 2003). Tashakkori and Teddlie (2003) further add that secondary data can be used for the purposes of corroborating research findings by serving as a support for the primary or the main means of data during research undertaken. Taking this mixed method study into consideration, the parallel collection and interpretation of this quantitative health record data are mainly complementary to the main data on women, gathered through interviewing.

Quantitative data analysis is the analysis of numerical data (Williamson & Johanson, 2017). SPSS IBM version 20 aided in the analysis of the health record data. I started the data cleaning process by organising and cross checking to ensure that only relevant and accurate data were included in the analysis. I then developed a coding frame and inputted the data into the software. Uni and bivariate analysis were undertaken, and results reported using descriptive and inferential statistics.

3.5 Ethical considerations

Given the sensitive nature of this study, it was essential I adhered to strict ethical guidelines. Informed consent for this study was both verbal and written. Verbal informed consent was obtained when potential study participants expressed interest in taking part in the study after

being provided with the participant information sheet and study advertising material which were in both the English and local Ghanaian language spoken (Entwisle & Kozyreva, 1997). In addition, I explained the purpose of the study and what their involvement would entail. Written informed consent was obtained before the start of interviews. Participants were made aware of the voluntary nature of participation and their ability to withdraw or decline answering any question they were not comfortable with. Permission was also asked to digitally record the interviews.

Participants were also assured of confidentiality and anonymity. Participants were further assured that the community, hospital or pharmacy shop where data were gathered would not be identified during the process of writing this thesis and in subsequent dissemination of study findings. The health record data were similarly gathered in a de-identified manner to ensure the confidentiality and anonymity of study participants. During the process of data extraction, no personal information was extracted from the health records which could lead to identification.

All participants were offered financial reimbursement for their time, in appreciation for sharing their stories and recognising the value of their time. Apart from the hospital-based providers who all declined to accept the reimbursement, most of the women and some of the pharmacy workers and herb sellers accepted the reimbursement. Additionally, some of the women were helped with the payment of their medical bills. There were situations where women who reported to the hospitals did not have health insurance to help pay for their bills. In such circumstances, to save the lives of such women some of the health workers had to stand in as surety for them, that they would treat them and find ways of paying their bills. They often did this by contributing from their personal resources to pay the patient bills. As I was with the health care providers often during the period of data collection, I felt it was right to contribute when such situations arose. I further saw it as my way of giving back to the participants. However, I ensured that my contribution to the payment of participants medical bills was unknown to them, so that it did not in any way influence their participation or the responses they provided during interviews.

Additionally, due to the sensitivities and stigma attached to induced abortion in Ghana, it was envisaged that study participants may become emotional during the process of interviewing. The service of a trained counsellor was sought so participants could be referred should the need arise. Also, my own physical safety and emotional well-being were considered by conducting all the interviews at public places - either at the health facility or the workplaces of the participants and

regularly debriefing with the field work supervisor. Finally, to ensure that data gathered were well protected, data were reviewed by only the research team and stored in locked files and password protected computers.

Ethical approval for the conduct of this study was obtained from the La Trobe University Human Ethics Committee (HEC17-009) (Appendix H-Ethical clearance from La Trobe University). Ghanaian ethical clearance was also obtained from the Komfo Anokye Teaching Hospital and the School of Medical Sciences, Committee on Human Ethics Research and Publication (CHRPE/AP/547/17) (Appendix I-Ethical clearance from Ghana).

3.6 Convergent measures in enhancing trustworthiness of the study

Given the convergent nature of this study several measures were adopted to enhance study trustworthiness. According to Miles, Huberman and Saldana (2014) triangulation is one of the measures through which a study's trustworthiness can be enhanced. In keeping with this suggestion, I triangulated women's perspectives, provider perspectives and data from the medical records of women. Although interviewing was a one-off encounter, during data collection, I often summarised, sought clarifications and played back the interviews to participants as a way of seeking their feedback. I further sought feedback from critical friends. Costa and Kallick (1993) describe critical friends as trusted people who fully understand your research and periodically offer constrictive criticisms that help to move your work forward. I have two critical friends both of whom are Ghanaian academics. I spoke to them regularly about my research to seek their insight on various aspects of the work.

3.7 Summary

This chapter explained my choice of mixed methods research and provided a description of the methods used. It further highlighted theories which I drew on including feminist, stigma and ecological theories which were important in providing a nuanced understanding of the research problem and study findings. All aspects of the processes involved in gathering and analysing data were also presented. The chapter ended with a presentation of how I enhanced the

trustworthiness of the study. Study findings and identified factors related to abortion decision making (at the individual, community and societal levels) are presented in the next three results chapters. The following chapter (4) describes individual level influences on women's and abortion providers.

Chapter 4: Individual level influences on abortion providers and women

This chapter presents the first of four substantive findings chapters. It draws on the individual level of the ecological model to explore influences on abortion providers and women. Data were explored through the theoretical lenses of the ecological model, stigma, feminism and the three delays model. I start the chapter with a presentation on the demographic characteristics of abortion providers and women. I then explore factors that motivated abortion providers into becoming providers. I also examine the views of providers on women who access their services. The chapter continues with a presentation of conditions exposing women who participated in this study to unintended pregnancies, which they had resolved through unsafe abortions. Women's reasons forhaving abortions are reported, including the people with whom the abortion decision was made. Methods used by women in terminating pregnancies, complications experienced and whether they were counselled on adopting a method of contraception to prevent future unintended pregnancies is also discussed. I conclude the chapter with some of the delays experienced by women in noticing pregnancy, seeking and receiving care after undergoing unsafe abortions.

4.1 Demographic characteristics of participants

In total I interviewed 47 people for the qualitative strand of this mixed methods study. They included 23 abortion providers, 10 of whom were hospital based (*referred to as formal abortion providers within the context of this thesis)*, eight pharmacy workers and five herb sellers *(referred to as informal abortion providers)*. I also interviewed 24 women in-patients who had undergone unsafe abortions and subsequently sought medical care.

4.1.1 Demographic characteristics of formal and informal abortion providers

Formal abortion providers sampled for this study were mainly midwives (50%) (Table 3). The oversampling of midwives was due to their greater numbers than physicians and the fact that they

were more involved in the day-to-day care of women who report with all pregnancy-related problems, including unsafe abortions. Apart from midwives, I also interviewed three physicians (one gynaecologist and two general practitioners), a physician assistant and a public health nurse. The ages of the midwives ranged between 30 and 50 years. The oldest hospital-based provider interviewed was a 59-year-old public health nurse who had practised for 35 years. The hospital-based providers were well-educated with diplomas and university degrees.

Various categories of pharmacy workers were interviewed. Pharmacy workers consisted of three dispensing technicians, two pharmacists, two workers who learnt on the job and a medicine counter assistant. Dispensing technicians, who constituted the largest sample of pharmacy workers, were mainly young and aged between 26-30 years. This sample was well educated, with more than half having either a university undergraduate degree or a diploma in pharmacy from the Polytechnic. Pharmacy workers were predominantly male (n=6). The participant with the most experience had practised for 15 years, and although he did have formal pharmacy training, he mentioned learning a lot from his late father who was a pharmacist and had owned the shop he currently operated. Finally, I interviewed five herb sellers involved in abortion provision. Four of the five herb sellers were women. Three out of the five herb sellers were relatively young, aged between 20 and 38 years. The remaining two herb sellers were 50 and 70 years of age respectively. Herb sellers reported that the practice had been in their families and knowledge about herbs had been passed on from one generation of the family to the next. Levels of education among herb sellers were generally low.

Table 3: Demographic characteristics of formal and informal abortion providers (n=23)

Provider type	n	Sex		Age	Educational level	Years practised
		M	F			
Formal						
Midwives	5		5	30-50	Diploma	2-20
General practitioners	2	2		39-42	Degree	3-4
Gynaecologist	1	1		55	Degree + Specialist training	27
Physician assistant	1		1	31	Degree	7
Public health nurse	1		1	59	Degree	35
Informal						
Pharmacy workers						
Pharmacist	2	2		30-40	Degree	5-10
Dispensing technician	3	2	1	26-30	Diploma	2-6
Medicine counter assistant	1	1		35	Senior High School	4
On the job trained	2	2		24-45	Senior High school	2-15
Herb sellers						
Herb sellers	5	1	4	20-70	2-No formal education, 2-Primary school 1-Senior high school drop out	

4.1.2 Demographic characteristics of women

Women interviewed for the study were mostly single (63%) and aged between 20-29 years (46%) (Table 4). Three women were over 40 years of age. The interview sample of women were

mainly self-employed (67%) in the informal sector and operated their own very small grocery businesses. Equal numbers of women were educated to either the primary/junior high school or the senior high school level. A majority also reported having no children (58%).

Table 4: Demographic characteristics of women interviewed (n=24)

Characteristic	***Number of participants n (%)***
Age	
<20	5 (21)
20-29	11(46)
30-39	5(21)
≥40	3 (12)
Marital status	
Single	15(63)
Married	8(33)
Separated/divorced/widowed	1(4)
Educational level	
No formal education	3 (12)
Primary/Junior high school	9 (38)
Senior high	9 (38)
University	3 (12)
Employment status	
Formal sector	3 (12.5)
Informal sector	16 (67)
Student	2 (8)
Unemployed	3 (12.5)
Number of children	
0	14(58)
1-3	6(25)
≥4	4(17)

4.2 Reasons for providing abortions

I now describe a range of abortion providers' individual rationales for providing abortions. Interviews with formal abortion providers (gynaecologists, general practitioners, physician assistants and midwives) revealed most were influenced into becoming abortion providers due to training received as health care workers, and their exposure to the suffering of women from unsafeabortion related complications. Pharmacy workers and herb sellers, on the other hand, spoke of money derived from abortion provision as a major incentive. I start the section describing reasons why formal abortion providers, provide services, followed by pharmacy workers and then

herbsellers, who provide abortions informally.

4.2.1 Formal abortion providers

At an individual level, most formal abortion providers presented altruistic reasons for their decision to offer abortions. Their reasons included using training obtained in abortion provision, fulfilling professional responsibilities and personal experiences:

> I have been trained to provide the service and if I who has been trained refuse to provide it, women would go to all the wrong places which could lead to their deaths and other problems *(Aunty Charlotte, Midwife).*

Other formal providers viewed providing abortions as part of their routine duties and contribution towards preventing deaths of women through unsafe abortions:

> I see it as a way of helping to reduce maternal mortality; we are helping the women. Can you imagine if we all say that because of our religious values we will not provide services and women are out there taking medicines, concoctions and all that and dying. Our job is to save women, to save lives, I see it as my role in saving the lives of women. If that midwife is not providing abortions, she could be doing deliveries. I am also doing MVA's *(Manual Vacuum Aspirations). I*n one way or the other we are both saving women's lives so that is how I see it *(Aunty Mary, Midwife).*

Others highlighted the important contribution of their work as abortion providers to saving the lives of women. In his duty as physician, Dr Seth regularly encountered the needless deaths and suffering of women through unsafe abortions. This exposure had a profound effect onhim and influenced his decision to become an abortion provider to ensure that more women can safely access abortions:

> There have been instances where doctors have refused to perform some of these services and patients have died from attempting the abortions on their own with various substances. At the end of the day, these same people will be brought to you when they are dying, and you cannot take the pain of not having helped away. …If you happen to be in my shoes some of the stories which come to my consulting room are pathetic…my hands are not tied. I have accepted to do it to help *(Dr Seth, General practitioner).*

A few described personal experiences as influencing their decision to become abortion providers. A physician assistant recounted losing a close friend to an unsafe abortion related death:

> …a friend was pregnant, she wanted to have a safe abortion but was denied so she decidedto use her own means to terminate it and she ended up dying. I felt if my friend was helped, she would still be around. It is one of the reasons personally I am okay because it saves lives *(Aunty Jane, Physician assistant).*

Apart from these reasons for becoming abortion providers, the financial gains involved in abortion provision could have also influenced formal abortion providers. When asked how much they charged for their services, some formal providers were unwilling to disclose this. The unwillingness of providers to disclose their earnings from abortions may have been influenced by their desire to avoid being stigmatised and tagged as earning 'blood money' (Payne et.al.,2013, p. 123). In Ghana, being identified as an abortion provider often results in the experience of various forms of stigma, marginalisation and labelling from both colleagues and members of the wider community (Payne et al., 2013). These consequences of providing abortion, some argue (Payne et al., 2013), has the potential to influence how abortion providers choose to divulge their work to others (see Chapter 5 for more on cost of formal abortions). Formal abortion provider narratives revealed that issues such as receiving training in safe abortion provision, exposure to the deaths and suffering of women from unsafe abortions and personal experiences, were all important influencing factors in their decision to provide abortions. Among pharmacy workers however, this was not the case as they seemed to have been influenced more by financial incentives associated with being an abortion provider, and less concerned about the stigma.

4.2.2 Pharmacy Workers

Interviews with pharmacy workers revealed the important role that financial considerations played in their decision to become abortion providers:

> ….it is part of my work and the financial gains are good, so I am in it. Within the snap of a finger you get money. … and it is not that difficult to make all that money (*Bra Jack, Dispensing technician).*

> I was introduced into abortion provision by a friend, when I completed school… during my internship the monthly allowance was very small, umm it was barely enough for me to survive on. I used to complain a lot … the friend was my senior in school he told me if I was interested, he would show me how to earn some more money (Bra *Ethan, Dispensing technician).*

Bra Dan, who worked in his uncle's pharmacy, found the large number of women who sought medical abortion and the financial returns an important motivating factor for providing the service:

> …umm the abortion medicine when I started working in my uncle's shop, he was not selling it, but people often came to the shop asking for abortifacients, so we moved into it, besides the profit margins are good *(Bra Dan, On the job trained).*

4.2.3 Herb sellers

Like the pharmacy workers, herb sellers were similarly influenced by money to become providers. They, however, made judgements on who was worthy to receive the abortifacients:

> It is not all the time I sell, I try to discourage them by giving them wrong herbs which will not cause the abortion. …by the time they realise they had been deceived it would have been too late for the abortion *(Sister Vivian, Herb seller).*

There are varied individual reasons why both formal and informal abortion providers offer abortions. Formal providers interviewed for the study presented themselves as providing abortions due to concerns about the health and welfare of women. This was contrasted with pharmacy workers and herb sellers who emphasised the direct financial benefits of their involvement in abortion provision. Knowing women who accessed services from the various categories of abortion providers is important in the design of targeted interventions.

4.3 Provider views of the women who access their services

Understanding providers' perception of women who seek their services is important in identifying and developing targeted interventions to the at-risk population. I start this section with the views of formal abortion providers on the characteristics of women who access their services.

4.3.1 Formal abortion providers

Both formal and informal abortion providers stressed the possibility of all sexually active women within the reproductive age experiencing an unintended pregnancy, which they might end through an abortion:

> We have all groups coming from teens, to young adults, middle class, middle-aged women,to anybody (*Dr Seth, General practitioner).*

In contrast Dr John, another GP, reported that:

> They are mostly teens and when dealing with them you can see that most are quite scared due to the perception that they are not supposed to engage in sex and all that *(Dr John, General Practitioner).*

Other formal abortion providers perceived students, women in difficult financial circumstances and those who had fulfilled their childbearing goals as resorting to induced abortions should they experience unintended pregnancies. Aunty Mary perceived that they were:

> …mostly students and the reason they give for the abortion is that they will want to continue their education. Another group of people who come here are those who are poor or in financial difficulties. The person might be married and all that, but might not want to keep the pregnancy because she is in dire financial conditions. She might say that I have a lot of children, so I cannot cater for an additional one. It is mainly the poor, students and those who have many children, so do not want an additional child who come for abortions *(Aunty Mary, Midwife).*

Some formal abortion providers who expressed similar views, also stressed that more educated clients sought contraception rather than abortion:

> I get clients from all backgrounds, the singles come, the married come, the highly educated come although they are not so many like the ones who are not very educated. The educated ones mainly come for family planning services *(Aunty Joyce, Public health nurse).*

Having discussed the characteristics of women who access services from formal providers, I next discuss informal provider client characteristics.

4.3.2 Informal providers

In this section, I first discuss the perspectives of pharmacy workers and then herb sellers.

Pharmacy workers

Pharmacy workers thought vulnerable women from a diverse range of backgrounds (like those with low levels of education, teenagers, single women, commercial sex workers and women who cannot support additional children) used their services. Bra Jack, a dispensing technician, dismissively described providing services to women he thought might be involved in the

commercial sex trade. Bra Jack's revelation of the use of unsafe abortions by some commercial sex workers to terminate unintended pregnancies, suggests they may not be using contraception to protect against both pregnancies or the risk of acquiring sexually transmitted diseases and infections (STDs/STIs). He further described women whose partners abandoned them upon realising that they were pregnant, using abortions to resolve such pregnancies. In the Ghanaian context, gender norm expectations demand that if a man acknowledges responsibility for a pregnancy, it is his duty to support the woman financially until she delivers. After the birth, he could formalise their relationship through marriage (Fayorsey & Fayorsey, 1992). Where they do not want to keep the pregnancy, the man still has the responsibility of giving the woman financial assistance to enable her afford an abortion, as most men are in financially more advantageous positions than women. Men who find themselves in such situations and unable to fulfil this gender role expectation sometimes feel compelled to run away and leave the women alone with the responsibility of deciding what happens to the pregnancy. Women whose partners abandoned them when they were pregnant were often perceived by Bra Jack and others as seeking abortions for children they could not support:

> …I have prostitutes coming; the prostitutes are more. They come here very often to buy abortifacients. Other times too, a lady gets pregnant and the man runs away leaving her all alone with the responsibility of deciding what happens to the pregnancy. In such a situation you have to help the person (*Bra Jack, Dispensing technician).*

Others mentioned the large numbers of young people needing abortions:

> … are mainly teenagers and most end up becoming pregnant because no one is educating them about issues on their sexuality *(Bra Harrold, Pharmacist).*

> They are mainly between the ages of 13-38 years and about (70%) percent have been educated to the Junior high school level. Regarding their marital statuses they are mainly unmarried, since 2008 I have encountered just one married woman wanting an abortion (*Bra Henry, On the job trained).*

Herb sellers

Like the pharmacy workers, most herb sellers described women who accessed their services by occupation. Sister Hannah indicated that students formed the majority of her clients:

> ...women from all backgrounds come but the polytechnic students, Junior high and Senior high students are more (*Sister Hannah, Herb seller).*

Despite the apparent risk of complications for women who use herbal abortifacients (due to the non-regulated way it is used and administered), students relied on these providers, as they often had no money and herbs are cheaper than services from both formal providers and pharmacy workers. Nyanzi, Nyanzi, and Bessie (2005) study on the experiences of men who sought abortions for their partners similarly reported the low cost if one used the services of a herbalist for an abortion. Another herb seller observed that women engaged in apprenticeship training formed the majority of her clientele. She further emphasised that currently most women preferred orthodox methods than herbal abortifacients:

> … some come, especially the hairdressers and dressmakers. … now the sales are not like it used to be you know things are now changing people prefer going to the doctor (*Sister Sophia, Herb seller).*

While both formal and informal abortion providers acknowledged the possibility that all women may need to induce abortions at some point in time; students, teenagers and single women were perceived by all providers as the majority of those who sought care. I now turn to a discussion of methods of abortion provided by both informal and formal providers.

4.4 Methods of informal and formal abortions

In this section, I examine abortifacients identified and their mode of administration. I start the section with herbal abortifacients.

Herbal abortifacients

Some herbal abortifacients identified during my interaction with herb sellers were *Gyiwahome*, *Nyayaaba* and *Kokowhidie* which are raw herbal products. When asked how *Gyiwahome (meaning relax in the Akan language)* was administered, Sister Hannah (who was heavily pregnant at the time of the interview) mentioned the ability of this abortifacient to serve a dual purpose as both contraceptive and abortifacient, depending on how it is used. Similar accounts of herbal abortifacients serving dual purposes were identified in Anarfi (2003) study titled 'The Role of Local Herbs in the Recent Fertility Decline in Ghana. See Figure 5.

> … *Gyiwahome* you break a piece and put it in a water bottle. You then add some water toit and drink. If you are pregnant between one and three months

everything will come out.Even me who is in the advanced stages of pregnancy, when I take it, I would have to be rushed to the hospital because I will start bleeding. *Gyiwahome* can also serve as a contraceptive, but here immediately after sex you use it for an enema, so you do not get pregnant. To use as a contraception, it is used in the anal passage not like the first which was oral *(Sister Hannah, Herb seller)*.

Figure 5: *Gyiwahome:* Herbal abortifacient and contraception

Source: Field work data (2017)

Other herbal abortifacients that emerged during my interaction with herb sellers were Kokowhidie and Nyayaaba (Figure 6). According to Aunty Vivian, these two herbal abortifacients must be used together to induce the abortion:

> …Kokowhidie and Nyayaaba goes together. …you must grind it into the form of a powder and then mix it with some water not too much so that it can be moulded into little balls for insertion in the vagina as pessaries. For it to go deep in and reach the cervix it is better to have sex so your partner can push it further down the cervix. However, if you do not have apartner to do that then you must use your fingers to push it very deep *(Aunty Vivian, Herb seller)*

Figure 6: Kokowhidie and Nyayaaba

Source: Fieldwork data (2017)

Whereas Gyiwahome served the dual purpose of an abortifacient and a contraceptive, Kokowhidie *and* Nyayaaba which are used together are only abortifacients. I next discuss pharmacy abortion provision.

Medical abortifacients

Pharmacy workers revealed that most dispensed abortifacients containing either misoprostol alone or a combination of misoprostol and mifepristone. Some of the popular abortifacients referred to during my interaction with pharmacy workers were *Medabon, Cyctotec, Arthrotec, Penetrex knot kit and Mifekit.* See Table 5.

Table 5: Some popular abortifacients in Ghana and their active ingredients

Brand name	Active ingredient
Medabon	Misoprostol and Mifepristone
Cyctotec	Misoprostol
Arthrotec	Misoprostol and Diclofenac
Penetrex Knot kit	Misoprostol and Mifepristone
Mifekit	Misoprostol and Mifepristone

Source Field work data :2017

A majority of pharmacy workers mentioned Medabon, containing both misoprostol and mifepristone as the most popular abortifacient dispensed. A pharmacy worker commented on the role friends played in helping women identify these abortifacients and persuade them of its efficacious nature:

> …*Medabon* that is what the people know in the system, that is what Ghanaians know. …some come with used packs, others come with the name written on pieces of paper because it might have been used by a friend and the friend recommended it. If you suggest another, they do not want it nothing can change the person's mind they would move from one shop to the other till they find it *(Bra Jack, Dispensing technician).*

Others expressed similar views about the popularity of abortifacients based on brands often purchased by clients:

> …these two common abortifacients *Cytotec* and *Medabon*. I do not know how they got to know, almost all of them know it. I do not know whether they get it from their friends or something they just walk in *mpawokyew meto Cytotec* or *meto Medabon* (clients walk in and say they either want to buy C*ytotec* or *Medabon*) a while ago a gentleman even came here asking for some, it has not even been more than 5 minutes ago *(Sister Alice, Medicine counter assistant)*. See Figures 7 and 8

Figure 7 and 8: *Medabon* and *Cytotec*

Source: Field work data (2017)

According to the pharmacy workers sampled for this study, the two most popular abortifacients dispensed were Medabon and Cytotec. Dispensing these abortifacients to women alone is not enough, the need for information on the safe administration and follow up care is important.

Dispensing medical abortifacients

To prevent failed and incomplete abortions, educating clients on safe dosages of abortifacients is needed. For most pharmacy workers in this study, because they provide the services illegally and have therefore not been trained, this was not done:

> …those who come with used packs of the medicine and the names written on pieces of paper I assume that they know how to use it, so I do not show them. …there are others too, when you see them, you can tell they have experience in the use of abortifacients. Those women it is not difficult working with them. Some of them too are educated so they can read the product information in the pack and follow the instructions *(Bra Ethan, Dispensing technician).*

A few pharmacy workers commented on giving dosage advice to clients. On whether he advised his clients how to administer abortifacients dispensed, Bra Harrold mentioned prescribing dosages which were clearly against the manufacturer's instruction and a health risk to clients. Arthrotec is a prescription only medicine containing diclofenac and misoprostol and it is used for relieving some of the symptoms associated with osteoarthritis and rheumatoid arthritis. It is

contraindicated in pregnant women due to its possibility of causing abortions (Pfizer Australia Pty Ltd, 2017). Prescribing high dosages of this medicine to pregnant women is clearly dangerous:

> … *Arthrotec* I have devised a way of administering it which is very effective but at the sametime dangerous because it can collapse the system, it necessitates the intake of 12 tablets. You start with four tablets; first you insert two in your private part and then two under the tongue, after 24 hours you insert four in your private part, after this you use 1 sublingual every 3 hours till the four tablets get finished. It is very effective it will wash everything out,the only negative about is that because it is not according to the manufacturer's instructionit is dangerous it can collapse your system *(Bra Harrold, Pharmacist).*

From Bra Harrold's quote, he is aware that women to whom he dispenses these medicines are not just in danger of experiencing unsafe abortion related complications, but are also in danger of significant complications and even death.

Another pharmacy worker based his premise of not educating clients on how to use these abortifacients and some of its interactions, on the basis that clients were often just interested in obtaining them. Women may feign hurriedness and disinterest in lengthy interaction with pharmacy workers as a strategy for protecting their privacy. They could be concerned about the possibility of being judged should they engage more with the pharmacy workers. Given the low levels of education among study participants and the increased probability of failed and incomplete abortions when used incorrectly, the current practices of pharmacy workers in the study endangers the health of clients:

> … When they come, they are often in a hurry to buy the medicine and leave. If someone is pregnant and wants it out, all they are interested is the medicine to help them get it out. They are not interested in how the medicine will work and react with their body, if it is ableto do the job, they are happy *(Bra Henry, On the job trained).*

Others labelled women and concluded they needed no further information on dosage:

> …those who come with used packs of the medicine and the name of the medicine writtenon pieces of paper, I assume that they know how to use it *(Sister Alice, Medicine counter assistant).*

Women dispensed abortifacients without the needed information on safe dosages are clearly exposed to increased risk of morbidity and mortality, I therefore explored what pharmacy providers did when clients reported back with complications.

Advice in the event of a complication

A few pharmacy workers spoke of advising clients to report back to them should they experience any unusual side effects:

> … I sometimes tell them that if the bleeding is unusually long … they should come back to tell me, so I give them something to stop the flow. In such instances I give tranexamic acidand administer blood tonic to enable them gain back the blood they lost quickly *(Bra Harrold, Pharmacist).*

In contrast others said:

> …I tell them to immediately go to the hospital if they experience something like that *(Sister Kate, Dispensing technician).*

The description of some pharmacy workers about how they managed clients with abortion complications shows they could be an important resource in safeguarding the lives of women, especially if they receive the needed training and their activities are legalised. Pharmacy workers could serve as first line staff in stabilising women who experience induced abortion complications, and further liaise with hospitals where they could refer women who present with pregnancies above gestation for safe terminations.

Methods of abortion provided by formal abortion providers

A majority of formal abortion providers in this study chose a method of termination based on the circumstances of the woman; that is the gestation at presentation and whether she presented for safe or post abortion care after a complication. Dr James, a gynaecologist with 27 years' experience said:

> …gestational age is the most important index I use, based on the gestational age I would choose a method that best suits the client, for example if someone is twenty-four weeks pregnant and wants a surgical termination it could lead to a lot of bleeding, the best in thisinstance would be medical *(Dr James, Gynaecologist).*

Like Dr James, Aunty Joyce who was the longest serving practitioner (35 years) recruited for this study, acted in accordance with WHO regulations for trained nurses allowed to provide first trimester medical abortions:

> I do not give medical abortion after nine weeks, if you come and it is after nine weeks youmust go for MVA (*Manual Vacuum Aspiration) (Aunty Joyce, Public health nurse).*

Dr John, on the other hand, mentioned using Manual Vacuum Aspiration (MVA) as women he attended to mainly presented with incomplete abortions:

> I mainly use MVA because probably the patient tried to terminate it using medicine and it did not come and they have retained products. I take them to the theatre for evacuation ofthe rest of the products *(Dr John, General practitioner).*

Another presented a similar view:

> I use MVA because most of the clients come with incomplete, it gives the certainty that all the products of conception are out *(Aunty Harriet, Midwife).*

Others mentioned using surgical abortions due to concerns about the possibility of incomplete abortions from medical abortions. Provider worries about the probability of incomplete abortions might have been influenced by their knowledge of the likelihood of women wrongly dating their pregnancies, which affects the efficacy of abortifacients administered:

> …I prefer the surgical because sometimes if you give medication, for the medical it can fail and you must do a surgical removal *(Aunty Marian, Midwife).*

Aunty Jane spoke of providing MVA because she found calls from women who choose medical abortions bothersome:

> …with the medical when the clients come, I do give them my phone number, everyone who comes here I give my contact so that if they happen to face any problem they can call.Clients who opt for medical abortion I receive incessant calls from them, everything they go through they call and complain. I have abdominal cramps, the abortion has not occurred, this and that is happening, they will call and call and call but with MVA's there is nothing like that *(Aunty Jane, Physician assistant).*

In summary, while some herb sellers stressed the ability of their abortifacient to also serve as contraception, untrained pharmacy workers did not only dispense medical abortifacients but also treated women who presented with sometimes dangerous methods for complications after accessing their services. Among formal providers, they mostly used manual vacuum aspiration because the women they treated mainly presented with incomplete abortions. Women underwent abortions because the pregnancies they experienced were unintended.

4.5 Why women experience unintended pregnancies

Though knowledge of contraception among study participants was high, this did not,translate to use. Sylvia typifies this in the quote below:

> I have heard it can help you to space births and prevent unintended pregnancies, but they all have side effects, that is why I use the natural method *(Sylvia, 38-year-old, Informal sector employed).*

Like Sylvia, sampled women mentioned various reasons for contraception non-use.

4.5.1 Reasons for contraception non-use

A range of personal experiences and misconceptions influenced women in this study against contraception use. Some for instance mentioned:

'Irregular' sexual activity

Women involved in intimate sexual relations and therefore exposed to the possibility of unintended pregnancies, sometimes decided against contraception use as they rarely had sex:

> I have heard about it but have not used any of the methods before because umm I do not have sex often *(Victoria, 21-year-old, Formal sector employed).*

There were other times, when women's choice of contraception was clearly unsuitable for their pregnancy prevention needs:

> I was using the pills but got tired of having to take it every morning because I have sex just once in a while *(Eva, 18-year-old, student).*

Concerns about side effects

A significant number of women in this study decided against contraception use because of undesirable side effects:

> I am afraid ….. I heard when you adopt any method of contraception or family planning it will lead to placenta retention after delivery *(Nancy, 18-year-old, Unemployed).*

> …I had ever wanted to use contraception, but I have undergone a fibroid operation before, and I have heard it is not safe for someone who has ever had fibroids operated on to adopt a method of contraception, because the contraception feeds the fibroids and make them grow back quickly (*Lydia,38 year old, Informal sector employed).*

Others said:

> …. I heard you will develop a big stomach when you use contraception because your menses will… cease ….. and the blood which was supposed to come will accumulate in your body and bloat the stomach *(Eunice, 28-year-old, Informal sector employed).*

Women's concerns about the negative impact of contraception sometimes made a greater impact on them than advice on pregnancy prevention given by well-meaning relatives. Despite being advised by her husband to use contraception, Jacqueline reported:

> …. after giving birth, my husband advised me to go to the family planning workers to adopt a method of contraception …. umm but I refused as I had heard from someone that using contraception caused irregular menstrual flow as well as the reduction in the quantity of blood accompanying the flow *(Jacqueline, 21-year-old, Informal sector employed).*

Others decided against contraception use because they worried it would impair their ability to have children in future.

Fears about contraception affecting future fertility

Most women interviewed for this study were single and yet to have children. Misconceptions about the ability of contraception to cause infertility therefore profoundly impacted their decision against using it. Ghanaian society is pronatalist and infertility is sometimes considered a fate worse than death (Nuknuya, 2003). Infertility is, however, gendered as women are the ones who are mostly blamed for being the cause (Tabong & Adongo, 2013). Barbara, could not imagine how she would survive such a fate should contraception make her infertile:

> ….. I have not used any method of contraception before. I have heard from people, I mean a lot of people, that when you use it umm let say if you maybe adopt a two-year plan, afterwards you will not be able to give birth in future. I am so scared of those things. What about if I adopt a method and I am unable to give birth when I get married (*Barbara, 23- year-old, Formal sector employed).*

Janet, a 22-year-old who was having her second abortion, shared similar views of not using contraception due to fears of it impeding her future fertility:

> ….to be frank with you family planning I am really, really scared of it. At least with this, they will treat you at the hospital and you are free but family planning *noooo* I have heard whenyou do it, you might not even have children in future *(Janet, 22-year-old, Unemployed).*

There were a few women in this study who had actually used contraception but stopped and decided against future use due to unpleasant side effects.

Negative experience from previous contraception use

Women's decision against current contraception use was also influenced by a previous negative experience from its use. Matilda, a 31-year-old woman who had a previous negative experience with contraception decided against current use:

> I adopted the contraceptive implants, but had it removed in less than four months. ….I was never myself during the time I had those implants in, umm it made me always tired, I also felt very dizzy and sometimes when I am like maybe walking …suddenly it would be like everything was going black and I am about to fall….those symptoms were sudden. Whenever they occurred, I had to stop whatever I was doing and look for a place to sit, wait for it to pass before I could regain my composure and strength to continue what I was doing. It also led to a reduction in the number of days I menstruated …. … I sell grilled fish so I am always close to fire. What about if I happen to collapse while grilling fish and there is no one to help me *(Matilda, 31-year- old, Informal sector employed).*

Another participant spoke against current contraception use due to unpleasant side effects previously experienced. Patricia, a 44-year-old trader, who sold her wares by moving from one house to the other in her community, chose the injectable method of contraception as her birth control option. Due to the unpleasant side effects, Patricia stopped using contraception and experienced an unintended pregnancy, which she ended through an abortion:

> … in all I would say I used contraception for 4 years and have since not used any method. When I was well into the fourth year of use, I started experiencing dizziness … it was sudden dizziness and when it occurred, I had to stop whatever I was doing and look for a place to sit and rest a while before I could continue with my activity *(Patricia, 44-year-old,Informal sector employed).*

Weight gain also emerged as important in influencing women's decision against current contraception use:

> …. I gained a lot of weight when I was using injectables, since I stopped you can see, I am now fine again *(Ivy, 42-year-old, Informal sector employed).*

A few women who previously used contraception but experienced adverse side effects were unwilling to go on a method again as they worried about the possibility of experiencing similar reoccurrences. Among the participants, were a few who attributed their contraception non-use to lack of knowledge.

Lack of knowledge about contraception

A few women spoke of contraception non-use due to lack of knowledge. Young women's lack of knowledge about contraception could be explained by general conservative Ghanaian attitudes towards sex and all issues concerning it. Sex is shrouded in secrecy and not discussed openly, for fear that such open discussions may cause young people to become interested in and desirous of experimenting with it.

> I do not know how to use it, have not heard much about it… *(Leticia, 19-year-old,Unemployed).*

Another commented that:

> I have been hearing some adverts on the radio about the emergency contraception pill. They said it can be used up to 72 hours after sex to prevent pregnancy, that is all (*Irene, 18-year-old, Informal sector employed).*

Apart from this, there were some women who experienced method failure resulting in unintended pregnancies, which they used unsafe abortions to resolve.

4.5.2 Contraceptive failure

Although emergency contraception is meant to be used as a back-up in the event of contraceptive failure, participants were using it as their regular contraception:

> I used Postinor 2, but it did not work *(Aileen, 20-year-old, Informal sector employed).*
>
> …. I used a post pill after the unprotected sex umm, but it failed me *(Christabel, 20-year-old, Informal sector employed).*

There were, however, instances where women inadvertently ingested expired contraception:

> …I have been using contraception consistently, I often use emergency *contraception* without any problems. This pregnancy occurred when I used a post pill given to me by a friend not knowing it had expired and so did not work (*Hagar, 20-year-old, Informal sector employed).*

Women also experienced unintended pregnancies due to an underestimation of their chances of getting pregnant.

4.5.3 Women's lack of knowledge about their bodies

A few women in this study demonstrated a clear lack of knowledge about their bodies and its reproductive capacities:

> …the pregnancy resulted from my first sexual intercourse. I did not think that I could get pregnant the first time (*Leticia, 19-year-old, Unemployed).*

Another participant despite not being menopausal, commented that:

> My last child is 13 years old. I did not think there was the probability of me becoming pregnant *(Patricia, 44-year-old, Informal sector employed).*

Contraception non-use was an important factor exposing women to unintended pregnancies. In the event of an unintended pregnancy, various reasons influence the decision of women to end it through abortions.

4.6 Reasons for having abortions

In this study women's reasons for undergoing abortions were influenced by their gender expectations, financial difficulties and stigma. A few of the study participants suggested undergoing abortions because their partners left when they became pregnant.

4.6.1. Partner abandonment

A common theme in women's narratives was abandonment. Study participants were mainly vulnerable women who entered their current relationships because of financial difficulties. Due to women's financial dependence on men; the men may have abandoned them to avoid additional responsibilities.

In situations of abandonment, women had the sole responsibility of resolving their unintended pregnancies. In Faustina's account she may not have seen herself being able to shoulder the responsibility and cost of raising a child all alone:

> …when I got pregnant, I called and informed him about the pregnancy, since then I have not been able to reach him. Nowadays whenever I call, the message I get is that his phone is switched off, I do not know whether he has changed his number. Umm he has moved out of his former accommodation too and I do not know where he currently lives. After all attempts at reaching him failed umm it was difficult umm, I initially did not know want to do with myself or how to handle the situation. I sat down and thought carefully about my current circumstances and concluded that I had no choice but to have an abortion, becauseif I had decided to keep the pregnancy, after birth who will help in raising the child? *(Faustina, 27-year-old, Informal sector employed).*

Lydia similarly described being abandoned by her partner after she informed him about the pregnancy. In instances where women are financially dependent on men for meeting their basic survival needs, the power relations tend to be in favour of the man. Lydia was a divorcee who entered another relationship mainly for financial support and was ordered by her second partner to get an abortion after she informed him of the pregnancy. Due to the power imbalance in Lydia's relationship, her partner did not inquire from her whether she wanted or did not want the abortion, he also was not concerned about how she terminated the pregnancy, as he did not bother to find out whether the money he gave was enough to enable her to have the pregnancy safely terminated. He even abused her emotionally and financially by not providing support at a

time when she needed it the most:

> …after informing him about the pregnancy, he gave me fifty cedis and told me to get an abortion that is all. He has since been avoiding me, I will call and call and call he refuses to pick. I contacted one of his friends who showed me where he lived. …He was a married man… I never knew (*Lydia, 38-year-old, Informal sector employed).*

Florence, an 18-year-old from an economically disadvantaged background, desired to further her education. This made her a prey for an older man who promised to sponsor her education. Though the man fulfilled his initial obligation by paying some of her fees in the first year of senior high school, Florence had to pay back in kind by offering sex in return. By the end of the first year Florence had become pregnant, so had to drop out of school to care for the child. Given her poor background and her financial dependency on the man, she had no option than to continue in the relationship. Florence, who was still with the same man at the time of this interview, decided against carrying a second pregnancy to term as she did not see herself being able to provide the needed care for another child:

> I will want this child to grow a little before having another. I live here alone. I do not even have anyone to help take care of this child *(Florence, 18-year-old, Informal sector employed).*

4.6.2 Limiting and spacing births

A few women who participated in this study, and had fulfilled their childbearing goals, chose to have their pregnancies terminated when they experienced an unintended pregnancy. Patricia, a 44-year-old woman whose last child was already a teenager, decided on an abortion when she became pregnant unexpectedly. Patricia may have felt unable to go through both the physical and the emotional toll of carrying another pregnancy to term, as she already had her desired number of children:

> I have five children; two girls and three boys. The last one is thirteen years I am done with childbearing I do not want any more children *(Patricia, 44-year-old, Informal sector employed).*

Women's decision for limiting births had gender undertones. Sylvia was coerced to have an abortion, as her partner not only blamed her for getting pregnant, but expected her to take

responsibility for pregnancy prevention:

> …I currently have three children and my husband already had two from a previous relationship making five in total. When I informed him about the pregnancy, he became upset and asked why I had allowed myself to get pregnant *(Sylvia, 38-year-old, Informalsector employed).*

The desire for birth spacing, to enable the provision of better care to existing children also is an important reason why some women had abortions. Jacqueline decided on an abortion as she wanted to space her children.

> My child is young. She is a year and a half, I would want her to grow a bit more before having another child *(Jacqueline, 21- year-old, Informal sector employed).*

There were also a few women in this study who underwent abortions to avoid the negative impact experienced during carrying pregnancies to term

4.6.3 Health reasons

Concerns about the sicknesses associated with pregnancies influenced a few of the participants abort their pregnancies. Ivy and Helena were worried about the possible toll another pregnancy could have on their health:

> I get sick during pregnancy and would have to be in bed for a greater part of the pregnancy. Besides, I have been operated on twice, another pregnancy would not be helpful (*Ivy, 42-year-old, Informal sector employed).*

Despite advice by her doctor on the possibility of dying should she carry another pregnancy to term, Helena did not get the support of her partner in preventing pregnancy. However, upon pregnancy, Helena aborted the pregnancy. She may have felt she was also acting responsibly towards the yet unborn child by preventing it from going through life with a birth defect as well as saving her own life:

> … my pregnancies are very difficult, I am put on bed rest in the hospital from two months till delivery through caesarean at eight and a half months. Besides all my children had birth defects which had to be corrected through surgery. My last child for instance did not have an anal passage so one had to be created for him. After the birth of that child the doctors advised I undergo hysterectomy since my womb had become weak. They also said that the chances of me dying

> should I carry another pregnancy to term were high. Upon discovery of this pregnancy, I became very scared and took measures to have it terminated, I was afraid I was going to die (*Helena, 40-year-old, Informal sector employed).*

4.6.4 Preventing out of wedlock births

Most women in the study, mentioned undergoing abortions because they were single. Lois, a 25-year-old lady, described her partner as wanting them to marry quickly when she became pregnant. Lois however decided on an abortion against the wishes of her partner, as she worried about the possibility of being stigmatised by other members of her family, should they get to learn about the pregnancy:

> He was happy and wanted us to organise a quick wedding ceremony, but I told him I wanted it out, because there was no way I could get all the things organised for the marriage before the pregnancy became visible. I told him that my parents would be surprised at the rush and would want to find out why. If they got to know that something like this had happened, they would be disappointed in me, because we get married before becoming pregnant in my family *(Lois, 25-year-old, Formal sector employed).*

Like Lois, Janet's partner wanted her to give birth when she became pregnant. She, however, went against his wishes and had an abortion because she was not willing to bear the stigma of having a child outside marriage:

> He wanted me to give birth, but he has not legally married me. I do not want to give birth before marriage (*Janet, 22-year-old, unemployed).*

Aileen's mother had a lot of power over her as she was not only dependent on her for a livelihood but accommodation as well. Aileen decided not to risk these things by displeasing her mother, hence her decision to abort her pregnancy:

> I was worried that my mum would be angry with me for having another child in her home without being married. When the first one happened, she warned me that it should not repeat itself and that she was not ready to accept another child in her home, because she did not give birth in her parents' home but that of her husband's *(Aileen, 20-year-old, Informal sector employed).*

4.6.5 Financial difficulties

Poor finances emerged as a major push factor that influenced many women to abort their pregnancies. Matilda, a mother of three girls, spoke of the husband's joy at her current pregnancy as he hoped it was going to be a boy. Given the difficult financial situation they found themselves in, Matilda was not desirous of having another child who might suffer even more deprivation:

> All our children are girls, so my husband was very happy when I informed him about this pregnancy; he was really hoping that this was going to be our long-desired boy. I, however,told him I cannot keep it due to our difficult financial situations. He is a driver and the money he earns is not very good. He does not even all the time get a vehicle to drive. There are times when he could go for months without getting a vehicle to drive and in such situations the financial responsibility of taking care of the family will be on me. …in fact, it is very difficult *(Matilda, 31-year-old, Informal sector employed).*

Nancy was not only unemployed but lived with her mother in rented accommodation belonging to her partner's family. Upon becoming pregnant, her partner ordered her to abort her pregnancydespite her desire to continue with the pregnancy. Though Nancy's partner was a student and therefore not economically independent, his privileged background gave him more power andcontrol in the relationship:

> I told my partner to allow me to give birth since the pregnancy had already occurred. He insisted that I get an abortion because he is in school and does not have the needed money to support me or the child *(Nancy, 18-year-old, Unemployed).*

Not ready for motherhood

In Ghana, motherhood is seen as the cherished gender ideal for every woman. In this study, however, there were a few women who mentioned using induced abortions to delay its onset. Women had induced abortions to maintain control over their present circumstances, secure their prospect for a bright future and the chance to make something meaningful out of their lives. Emily decided on an abortion to prevent a disruption in her career and chance of being financially independent in future:

> I am not ready to be a mother…I am still learning dressmaking and I have a year to finish and set up my own business *(Emily, 34-year-old, Informal sector employed).*

Hagar and her partner, on the other hand, were both young did not see themselves ready to become parents and experience the significant life changes that comes with it:

> …we are both young and not ready to be parents now. Umm the examination results are in and I will be going to the teacher training college (*Hagar, 20-year-old, Informal sector employed).*

For Victoria, who was in full time employment as a secretary, carrying the pregnancy to term could disrupt her career and opportunity of earning an income:

> I am still young and not ready for the pregnancy. Besides keeping it will interfere with mycareer *(Victoria, 21-year-old, Formal sector employed).*

4.6.6 Extramarital pregnancy

Ghanaian society is more tolerant of men engaging in extramarital sexual unions and even raising children from these unions. The same behaviour is however disapproved of and seen as a breach against gender expectations among women. In this study experiencing an extramarital pregnancy was an important reason which influenced the decision of a few women to abort their pregnancies:

> My husband has travelled out of the country, umm this [pregnancy] was a mistake (*Charity,36-year-old, Informal sector employed).*

In summary, a majority of women in this study terminated their pregnancies due to coercion, stigma and financial difficulties. Other important reasons for having abortions were in situations where women had their desired number of children and where they wanted to delay the onset of motherhood. After deciding on an abortion, women often choose to discuss it with people who would support their decisions and help them carry it through.

4.7 Partners role in women's abortions

Women sometimes chose not to let their partners know about the pregnancy, if they had no intention of keeping it and were aware their partners would oppose their decision.

Having an abortion without partner's involvement

Aileen chose not to inform the partner but instead relied on her mother, whom she knew would support her decision:

> When I became pregnant, I decided on an abortion with my mother because she does not want me to have more children without being married. I knew my boyfriend would not support the abortion because he has ever told me that should I get pregnant, he would not allow me to get an abortion because abortion is something that is not encouraged in his family *(Aileen, 20-year-old, Informal sector employed).*

Other participants chose not to discuss the abortion with their partners, as they had the necessary financial power and social connections to have their pregnancies terminated on their own:

> … the doctor said I could die from another pregnancy. I became very afraid when, I became pregnant again, I went to this clinic and aborted it without informing my husband. He only got to know that something like that had happened when problems arose from the abortion *(Helena, 40-year-old, Informal sector employed).*

> I talked and talked with him to make him realise that given our current financial circumstances an abortion was the best, but he was not willing to support the idea of me having an abortion. It even led to an argument between us. I waited for him to travel and went ahead with the abortion *(Matilda, 31-year-old, Informal sector employed).*

There were a few women who, upon realising that they were pregnant, acted with agency and took control of the situation to have their pregnancies aborted without their partners being aware that they were even pregnant in the first place. Irene, an 18-year-old girl who, hailed from the northern part of Ghana recounted her sad story of finding out that she was pregnant, when she came to southern Ghana to work during the school holidays. Irene was not only concerned about the disapproving looks and stigma she was going to suffer for becoming pregnant while in school, but also the possibility of the pregnancy disrupting her education. While pregnant girls are

sometimes expelled from school for becoming pregnant, the same fate does not befall boys who impregnate them, even if they happen to be their mates in school. To prevent this possibility, Irene decided not to delay till she returned home before having the pregnancy terminated. She acted pragmatically and relied on the help of her social network. Irene recounted her fear, confusion and willingness to adhere to any advice she got from her friends, even if they were inimical to her health, as long as it ended the pregnancy:

> I noticed that I was pregnant when I came here to work during the school holidays. …school had re-opened and all my fellow students who came to work had returned home to continue with their schooling. I was left here all alone as I just could not go back home with the pregnancy…hmmm it is such a disgrace. I really liked school and did not want this pregnancy to disrupt it…I used to cry so much, because I could not go back, I could not eat, I became so skinny. One of my friends who often visited the restaurant where I worked saw the changes and asked what was happening. I told her about my situation … I was very scared and confused at the same time. During such times you do not think properly, you do not care about the consequences of your actions, you are not sometimes even afraid whether the medicine you take to abort the pregnancy could cause your death *(Irene, 18-year-old, student).*

In other instances, women were left all alone with the responsibility of deciding on an abortion, where their partners ended the relationship as soon as they found out about the pregnancy. In such situations, women decide on an abortion as an act of responsibility. The gender norms expect responsible women to be married before birth, and if not, at least have a man claim responsibility for the pregnancy. Women who get pregnant in Ghanaian society without having a man claim responsibility for the pregnancy are labelled prostitutes and their children bastards. The women may also decide on an abortion as a means of demonstrating their strength and ability to gain back control over their lives after suffering such betrayal (by being abandoned by men with whom they were in a relationship because they thought they loved each other). Faustina decided on an abortion and sought help from her social network:

> …after deciding on the abortion, I asked help from a lady in my neighbourhood, although she is a nice person, she cannot keep secrets, so I told her that my menses had delayed. I was concerned that if I told her I was pregnant and wanted an abortion, she might end up telling other people… what you must bear in mind is that if you tell just one person something that is private, two other people will get to hear about it *(Faustina, 27-year-old,Informal sector employed).*

Some of the women also wrongly assumed that anyone who worked in the hospital knew how to abort pregnancies. Leticia, a nineteen-year-old girl, who had just recently completed senior high school and was waiting for her examination results, wrongly assumed that a friend who worked in the hospital could help her abort her pregnancy. Leticia's wrong belief about people working in the hospital being able to abort pregnancies is not uncommon. Reports in the Ghanaian media notes of various instances where women ended up with various health problems after contacting the wrong (non-professional) people in hospitals for their abortions *(See 21 June 2019 on ghanaweb.com- where a hospital cleaner at the Akuse Government Hospital was arrested for performing illegal abortions).*

In some Ghanaian hospitals, especially the publicly run ones, women needing abortions need to know the right people who will connect them with the doctors willing to provide the service. As reiterated by Anarfi (2003), women needing abortions need to have the right social connections to have it safely done. In such an environment, women who do not have the right social connections and money to pay for an abortion are left at the mercy of unsafe abortion providers. Leticia commented that:

> … I asked help from a friend who works in the hospital, I thought he would have knowledge about such things *(Leticia, 19-year-old, unemployed).*

Women in the study decided on aborting their pregnancies without involving their partners in instances where they knew their partners would oppose the abortion. This can occur when they had the needed financial resources, social network support and where they had been abandoned by their partners. This was not the same with all participants as there were some whose partners were involved in their abortions.

Partner persuasion

There were instances where women were 'persuaded' or commanded by partners into aborting their pregnancies. Jacqueline said:

> …when I informed my husband about the pregnancy, he was not happy. He told me to get an abortion to allow our child to grow a bit more before we give birth again *(Jacqueline, 21-year-old, Informal sector employed).*

Hagar commented that:

> …he was very afraid of how my parents would react to the pregnancy, so he told me to get an abortion and provided the money for it *(Hagar, 20-year-old-informal sector employed).*

Lydia's partner gave her some money and told her to get an abortion, after which he cut all means of communication with her:

> …things are already difficult for me… I told a friend who is like a brother and about my situation and asked whether he knew any medicine that could be used in an abortion and he showed me one (*Lydia 38-year-old, informal sector employed).*

Partner involved

Barbara mentioned deciding with her partner alone. Her decision to involve only her partner was informed by concerns about preventing stigmatisation. It further shows the egalitarian nature of their relationship:

> I took the decision with my partner alone. If you tell a friend and there is a problem and youare no longer friends. The person might use the fact that you have had an abortion to insult you *(Barbara, 27-year-old, Formal sector employed).*

Men were also found sometimes to support the decisions of their partners on how they wanted the pregnancy resolved:

> He was supportive, he told me that if I wanted to keep it or terminate it, he will support my decision (*Janice, 20-year-old, Student).*

In summary, women in this study were either directly or indirectly influenced or commanded by their partners or other family members into aborting their pregnancies. After deciding on an abortion, participants used various means to enact their decisions.

4.8 Methods of unsafe abortions

Women's account of efforts made to abort their pregnancies sometimes resulted in more than one method after initial failure. Lydia mentioned using both herbal and orthodox abortifacients in her abortion attempt. She had already been abandoned and subjected to emotional abuse by her partner, but was still willing to contact this very same man who had so abused and disrespected her because of her desperation to terminate the pregnancy:

> …I bought some herbal pills from the market. It was made in the form of small round balls (*pessaries*) I was told to insert in the vagina. … I used the medicine according to instructions, but it did not work. I rather developed some sores there. I later consulted a friend… and asked whether he knew any medicine that could be used to abort a pregnancy. …He went to buy some for me from the drug store. He told me to take three orally and insert one in the vagina. He said it was best if I could have sex after the insertion to push the medicine further. I called and called the man. He refused to pick the call, so I did the insertion without having a man to push it further through sex. That is why it did not work *(Lydia 38-year-old, informal sector employed).*

Irene revealed how poverty and the gender expectations on women (see page 86 above) sometimes influenced them into using unsafe abortion methods, despite their awareness of its negative consequences on their health:

> … I used sugar and Guinness stout. The friend who helped me, melted the sugar till it became black and then added the Guinness stout to it and made me drink. She then told me to do a lot of hard work … so I really worked the next day. At the '*chop bar*' where I worked, I made sure I fetched water to fill all the barrels that we used for cooking the food.The woman who owned the place was even worried that I was overworking myself. She told me to rest but I told her I was okay and wanted to work. She did not know I was doing that so I could have the pregnancy aborted. After combining the Guinness stout mixed with caramelised sugar and doing all the hard work it came out *(Irene, 18-year-old, student).*

Jacqueline spoke of being helped by her sister in her abortion attempt. Although she had no idea of the name of the abortifacient she ingested, she trusted her sister enough to have used it:

> My sister gave me an abortifacient. It is like the medicines they give when you come to thehospital, but I do not know the name. She mentioned having used it for an earlier abortion, she gave me what was left of hers *(Jacqueline, 21-year-old, Informal sector employed).*

Hagar's narrative revealed the influence pharmacy workers can exert over women who use their services:

> …I wanted to use Cytotec (*misoprostol only)* but when I went to the pharmacy shop, the person behind the counter suggested I bought XU kit *(misoprostol and mifepristone) instead since that was more effective. … I went for the additional money and bought that … (Hagar, 20-year-old-informal sector employed).*

In summary, women who resorted to unsafe abortions were often desperate to end their pregnancies. This desperation led to situations where they sometimes tried a combination of herbal and medical abortifacients in their abortion attempt, thereby increasing their chances of experiencing complications.

4.9 Complications

Haemorrhaging due to retained products of conception seemed the most common aftermath of women's attempts at unsafe abortions. Other complications experienced were fever, chills, abdominal pains and diarrhoea. Matilda had to rely on her mother in-law when her efforts at ending her pregnancy resulted in complications:

> I took the medicine in the morning. By evening I had started feeling chilly but at the sametime was also feverish. I experienced some abdominal pains and diarrhoea. By late evening I was feeling very cold and so slept early. Around 12:30am, I just could not do anything, I was so cold and I had diarrhoea as well. Around 6:30 am I started bleeding profusely and I became very weak… I tried and moved out of my room to the veranda. A neighbour saw me and asked what the problem was. I told her I was not well, so she called my mother-in-law and she came over and took me to a midwife in my community. When we went there the midwife told us this was beyond her so referred me to this place *(Matilda, 31-year-old, Informal sector employed).*

Another said:

> I was in so much pain, my mum found me and asked what the problem was, I told her I was experiencing menstrual cramps. She therefore went to buy coke and mixed it with plenty sugar for me to drink. She mentioned it will help the blood to flow freely. There was no improvement. The pain rather got worse throughout the night. In the morning she informed my father who is a herbalist and he also gave me some herbal preparation… .They saw no improvement and therefore brought me to the hospital. It was here they were told that I was trying to abort a pregnancy *(Hagar, 20-year-old-informal sector employed).*

> … I started experiencing lower abdominal pain and diarrhoea. In the evening, the pain became very severe I endured it as I did not want anyone to find out I had tried something like that. After a while, I could not feel the pain again, then two days later the pain came back. This time it was very severe I could not do anything. I cannot remember what happened next, all that I remember is that I was lying in a hospital bed with my mother and sisters standing by *(Leticia, 19-year-old, Unemployed).*

Another commented:

> I did not haemorrhage, but my menses did not come the following month. I therefore came to the hospital and upon examination it was found there were retained products of conception, I was sent to the theatre for evacuation (*Jacqueline, 21- year-old, Informal sector employed).*

Incomplete abortions were the most common complication for which women sought post abortion care. In some hospitals where women sought care, post abortion contraception was routine.

4.10 Post-abortion contraception

To prevent repeat abortions, contraceptive counselling and provision is recommended as an integral part of hospital-based abortion care (Singh et al., 2018; World Health Organisation, 2014, 2015). Study participants were, therefore, asked whether they were provided contraception counselling and given the option of adopting a method. Victoria, a 21-year old woman responded:

> … I was just told to abstain from sex *(Victoria, 21-year-old, Formal sector employed).*

Providers who treated Victoria missed an opportunity for contraception education, by acting on dominant community norms, where sex is expected to occur only in formally recognised unions. Despite counselling and the option of adopting a method Barbara (see below) declined.

> … for me it would not happen again, it would not happen again. They have given me the education about the various methods of contraception. I however did not adopt one, I would ensure this does not happen again. I would abstain. *(Barbara, 23-year-old, Formalsector employed).*

Helena was a 40-year-old who opted for an IUD after receiving abortion care.

> … I had an IUD inserted *(Helena, 40-year-old, Informal sector employed).*

Helena's use of a long acting reversible contraception (Bankole & Malarcher, 2010) may have beeninfluenced by her greater resolve to prevent future unplanned pregnancies , whereas Emily expressed common concerns.

> … I will want to have a further think about it before; I am afraid I might develop health problems if I adopt a method *(Emily, 34-year-old, Informal sector employed).*

Although post abortion contraception is a routine part of hospital-based abortion care, in this study, community norms regarding sex strongly influenced the poor uptake of this service. Single women in the study were either not provided with or declined to accept the service. This was not so with married women, who were provided with the service and mainly opted for long acting reversible contraception. Women also experienced various delays in their attempt at ending their unwanted pregnancies and accessing care from hospitals in the event of a complication.

4.11 Delays in noticing pregnancy, seeking and receiving abortion

There was a low level of knowledge among women in the study about pregnancy and its prevention. Some women who participated in this study did not realise that they were pregnant early enough. When Patricia noticed some changes in her body, she attributed them to the tedious nature of her work, despite previous pregnancies and deliveries. Patricia said that:

> …I used to get tired easily, but I thought it was because of the kind of work I did … I also notice that the number of days I menstruated had reduced from seven days to three days, but I did not think it was pregnancy. … when I noticed it was pregnancy, I was almost in my third month *(Patricia, 44-year-old, Informal sector employed).*

Others delayed receiving the needed care after their attempted abortions failed. Lydia experienced an abortion-related complication and decided to seek care at the hospital. However, due to concerns about the possibility of being stigmatised and experiencing obstetric violence (in the form of mistreatment and verbal abuse), Lydia did not tell the attending physician about her

abortion and was therefore misdiagnosed. She waited till her situation got worse before reporting her abortion:

> I was bleeding and other things so I decided to go to the hospital, but before I could tell the doctor what was happening, they run a whole series of test on me and concluded that I had typhoid fever and gave me treatment for that. Later when it got worse, I went to see the doctor again and told him the truth. All my legs and feet were swollen by then, if you touched the swollen part it would just push further into the skin, my blood pressure was very high, I could not walk, I even talked with difficulties. I was not aware of my environment I nearly died *(Lydia 38-year-old, informal sector employed).*

Patricia was bleeding after her abortion attempt, but when she went to the hospital her situation was not triaged as an emergency. She had to go through the normal process of getting the needed documentation and wait for her turn to see the doctor:

> …it took a very long time before I got a doctor to take care of me and I was bleeding all this while. My husband had gone for a hospital card...I became very weak during that period. It was when he came that one of the nurses sent me to the ward and administered IV fluids. Iwas very weak I bleed so much. … you see how white my palms have become it is now even better *(Patricia, 44-year-old, Informal sector employed).*

Matilda was referred by the midwife in her community, as she required more advanced care and also had to wait her turn before being attended to. She experienced further delays due to the poor nature of the infrastructure at the health facility where she sought care:

> … when we arrived, my in-law had to go for a hospital card for me, so I laid on one of the benches waiting for her. She took a long time in coming … when she came, and we waited our turn before we saw the doctor. The doctor wanted me admitted at the ward but there were no beds, so they placed this bed on the corridor and started treatment. When I became strong a bit, they asked whether I could go for an ultrasound. I did, and they detected some retained products. I later was taken to the theatre for evacuation *(Matilda, 31-year-old, Informal sector employed).*

4.12 Summary

A majority of women who participated in this study were from poor socio-economic backgrounds. A broad range of factors in their socio-ecological environment like their poor knowledge about contraception and misconceptions about its side effects, resulted in very low

contraception use, exposing them to unintended pregnancies and in several cases abandonment by partners or commands to abort the pregnancy. In the event of an unintended pregnancy, most used the services of informal, male abortion providers (mostly pharmacy workers) who were driven by financial gains to assist women to end their pregnancies. These unregulated providers made poorly informed judgments and decisions about women's reproductive health needs, reflecting the inherent poverty, lack of training, but also sexism and patriarchy within the environment. Due to the unregulated nature of informal abortion provision, they failed to provide adequate health advice or quality follow up care, putting women's health at major risk. In the event of an unsafe abortion complication, women experience various delays in their access to care. Therefore to safeguard the health of women; there is need for regulation and training of pharmacy workers in providing medical abortions. Also, regular training and values clarification workshops should be organised for formal abortion providers and health care workers in general, to prioritise and humanely treat women who access care in hospitals. The next chapter (5) presents community influences on the abortion related experiences of study participants.

Chapter 5: Abortion related experiences at the community level

While the findings described in the previous chapter focused on individual level of the ecological model, these second substantive findings highlight community level factors. I introduce the chapter by examining some characteristic features of the study area. I then explore ways in which community gender norms and perceptions about induced abortions influenced provider-client interactions. The cost of induced abortions and how their pricing was influenced by community characteristics are also discussed. In addition, the important role played by religion in the lives of community members and how this influenced both abortion seeking and provision is further examined. I conclude the chapter with a discussion on abortion stigma and the forms in which it manifests among women and providers.

5.1 Introduction

Ashanti Region, found in the southern part of Ghana, is the most populated Ghanaian region. Kumasi, which is the regional capital, is a vibrant economic hub and second largest city in Ghana after Accra, the national capital. A majority of the economically active segment of the region's population are employed by the informal sector (Ghana Statistical Service, 2013). In terms of religion, the estimates are that 77.8 % of inhabitants profess the Christian faith, 15.3% are Muslims and 0.7% are adherents of the traditional Ghanaian religion (Ghana Statistical Service, 2013). Driving through some of the main streets in Kumasi one sees a vibrant and an economically active Ghanaian city lined with shops, busy open markets, women and men selling and sometimes shouting at the top of their voices to attract buyers, sound systems blasting loud music, moving taxis and *trotros* (public mini-buses) blaring their horns. Another prominent feature that one cannot fail to miss in this city is the numerous places of worship and huge billboards advertising their times of worship. Itinerant preachers, who go about with loud microphones preaching in the various commercial areas and public transportation terminals, is also a very common feature. In undertaking this research, I was aware that these cultural influences from the various segments of the community impacted on the induced abortion-related experiences of informal, formal abortion

providers and women who were all part of the community.

5.2 Informal and formal abortion provider client interactions

In this section I explore ways in which the community to which abortion providers belong, influence how they interact with and perceive clients who sought their services. Community influences on provider client interaction were framed around three broad issues; (1) displaying common community judgemental and stigmatising attitudes towards women for becoming pregnant and having abortions, (2) women's difficulty and helplessness when they want to have abortions and (3) the view that abortion care from hospitals was the best in safeguarding the health of women. I start the section outlining the community influences on pharmacy workers.

5.2.1 Pharmacy workers

Most pharmacy workers sampled for this study generally showed negative attitudes towards women to whom they provided services. Pharmacy worker behaviour often reflected wider community attitudes, which disapprove of induced abortions and consider it murder (Bleek, 1978). Apart from this, there are also various community gender norms and expectations which guide the general behaviour of women in terms of their mode of dressing, behaviour and interaction with others. Therefore, women who dress or behave in ways that may not conform to the traditional gender expectations are often stigmatised. Bra Jack's behaviour towards his clients is typical of this type of behaviour and attitude. Bra Jack expressed seriously misogynistic views. He painted women who sought his services in a very negative light and used his discretionary powers to determine whom to dispense medical abortifacient. He argued that women who chose to undergo abortions must be punished:

> I think those women are promiscuous. when you see them even from their appearance youcan conclude that they are prostitutes. Some also tell lies they do not give their true information or identity. A lady came looking for an abortifacient, I really remember that girl, Anabel. The story she brought were all lies. I knew she was dating and having sex with three men at the same time. Such a lady I did not give her the medication. Some of these women you must let them face the responsibilities for their action. If they go to have the terminations in the hospital, they would not be given any pain medication. They will cut and cut you, if you go and they cut you like that next time you will learn '*sense*' and behave responsibly. It is not all women that you should help. Some

> of them you have to let them go away. Though they are young girls they are bad, they are promiscuous you must let them face the responsibilities for their actions (*Bra Jack, Dispensing technician*).

In his account below, Bra Ethan reflected community norms that expect women to have one regular sexual partner to whom they must be faithful. The same standards are however not required of men, as they are sometimes encouraged to have multiple sexual partners to show their strength and sexual virility (Izugbara Otutubikey & Modo Nwabuawele 2007). Bra Ethan also judged women and used his discretion to decide whether they were worthy or unworthy of care:

> … married women who want an abortion to space their children when they come, I alwayshelp them. There are some when they come and you ask them who is responsible for yourpregnancy? They cannot tell because they might have had sex with about five men, those people I do not help they are not "*correct*" *(irresponsible)* I tell them to leave *(Bra Ethan, Dispensing technician).*

Bra Harrold showed some understanding by highlighting the lack of sexuality education among women including those with high levels of formal education, but nevertheless said:

> I do not know, sometimes, I do not even know what to think about them, some of the women who come you realise that they are "fine" [should have the needed information on how to avoid pregnancy]. That person might be a student, sometimes even a university graduate. Someone recently came to buy abortifacient. She is a nurse, a nursing student, I asked her how come (what happened), a nursing student and you have found yourself in such a situation. I feel for some of them. Based on the information they are expected to have, it is unacceptable for them to be in such situations, I tend to underrate them, as a nurse. How come, you are not one of those young, young girls. You should have known better, is like education on issues concerning sex is low *(Bra Harrold, Pharmacist).*

The views expressed by some male pharmacy workers about women to whom they provided services, reveal a range of very judgemental attitudes towards women. They often chose to abuse the power they have over women, by subjecting those whom they felt may have breached community norms to humiliating delays, before finally deciding to provide the service to them. Their actions also sometimes led to greater risks for the woman, because the longer a pregnancy continues, the more complicated the abortion procedure becomes. Bra Henry for instance commented that:

> …a girl came needing an abortifacient, I asked her how the pregnancy resulted,

> she told meit was accidental and that she cannot tell the man who made her pregnant. How can this be, it is not like you are a child who was raped or something. You are an adult, I mean a full-grown adult and you tell me you do not know the father of your child, this tells a lot about your character. After narrating her story, I told her to leave and that I cannot help. She came again the next day to beg for the medicine, but I told her again to leave, she came the third day, I became worried that if I did not help her, she might do something stupid. I gave in and gave her the medicine to take the pregnancy out *(Bra Henry, On the job trained).*

In contrast to male providers, who were very judgemental of women to whom they provided services, Sister Alice attributed women's experience of unintended pregnancies and subsequent abortions on broader community structures which place sex in the category of taboo subjects (Montemurro, Bartasavich, & Wintermute, 2015). She argued that this community attitude towards sex denied women the opportunity of learning about issues concerning their sexuality and reproductive health:

> …they lack knowledge. Parents do not talk to children about issues concerning sex. They think it will make the child want to experiment. …If parents should sit down to talk with their children, they will give them a better explanation about sex and some of the things that could happen if they engage in unprotected sex… As parents, as teachers, as leaders and the rest we still can do more when it comes to our sex education (*Sister Alice, Medicine counter assistant).*

Like pharmacy workers, even the female herb sellers displayed common community judgemental attitudes towards women they served.

5.2.2 Herb sellers

In addition to labelling and stigmatising women, some herb sellers argued that women underwent abortions because they could not determine the man responsible for their pregnancy. Sister Sophia, said:

> …they are promiscuous. The men are many, so they do not know whom to name as the child's father *(Sister Sophia, Herb seller).*

The narratives of pharmacy workers and herb sellers revealed ways in which community norms of acceptable and unacceptable behaviour for women, influenced their interaction with clients. I next present how formal abortion providers, who are part of the professional community of health care workers, interacted with women to whom they provided abortion services.

5.2.3 Formal abortion providers

Formal abortion providers who participated in this study belonged to the professional community of health care workers and treat women who present to hospitals for both induced and post abortion care. Comparing formal and informal abortion provider attitudes in this study, I observed more favourable and empathetic attitude towards women by formal providers than their informal counterparts. Formal abortion provider behaviour may have been influenced by their professional code of conduct and ethics, where their training and professional responsibilities encourage them to treat all patients humanely and with respect. In this study, they highlighted their ability to provide the needed medical care to women, who present with unsafe abortion related complications and the safety of hospital-based abortions.

They are women who need help

Most formal abortion providers in this study highlighted their responsibility to treat women who present with unsafe abortion complications. Aunty Charlotte commented:

> They are women who need help and I have been trained to help them *(Aunty Charlotte,Midwife).*

Dr James's comments reflected his willingness to empathise with women who present for care:

> I see them as women in need of help and most are desperate *(Dr James, Gynaecologist).*

Aunty Joyce's comments highlighted the need for all formal abortion providers to provide humane and respectful care to clients they served. Aunty Joyce's assertion plays an important role in the ethos of members who belong to the community of health care professionals:

> It can happen to anyone. You must put yourself in the client's situation. Some of them, it is circumstance that puts them in that situation. You must be compassionate *(Aunty Joyce, Public health nurse).*

Apart from formal abortion providers highlighting their ability to provide the needed care, for women they also lauded women's decision to seek care at the hospital.

They have taken the best decision

Many providers praised the decision of women to seek abortion care from qualified health care professionals, because of the full range of services they offer:

> I think they have taken the right decision by coming here… we counsel them, and they adopt a family planning method. This prevents future unintended pregnancies and repeat abortions. I think they have personally made the right decision *(Aunty Jane, Physician assistant).*

The comments of other providers revealed that they understood the power that abortion-related stigma sometimes had in preventing women needing care from accessing the service from trained providers in hospitals. Aunty Mary, who mentioned hospital-based abortions as being better than the other methods, also added that women needed courage to access the service. Aunty Mary understood that due to the general negative and often hostile attitudes of community members towards abortion and those who undergo it, women had to be willing to scale various barriers in order to access care:

> If you are bold enough to walk to a facility, that you are coming for an abortion or to seek for treatment for an abortion complication, to me you have taken the best decision ratherthan being out there using various medicines which would not help you (*Aunty Mary, Midwife).*

Formal providers did not only highlight their ability to provide safe abortions, but also mentioned hospital-based abortion care as the best for women who want to end their unintended pregnancies. However, access to abortion and subsequent care comes at a financial cost. This cost plays an important role in how and where women access care.

5.3 Cost of informal and formal abortions

A complex picture emerged about how the cost of service was determined by both informal and formal abortion providers. Among informal abortion providers in the study, most used very ingenious ways of determining the cost of their services. Some spoke using the location of their pharmacies to determine service cost; that is, if the shop was in a wealthy neighbourhood, the abortifacient was often sold for more than the same product in a poor neighbourhood. Other

strategies in determining service cost included judging the appearance of the prospective client and the desperation of women.

Informal abortions

When asked how much he charged for his services, Bra David mentioned using the community (in which his pharmacy shop was located) to determine service cost. He commented that he sold his abortifacients cheaply because he operated in a poor neighbourhood:

> I buy the abortifacient from the wholesalers at ¢80 cedis and sell it for ¢90 cedis (*US$ 15- 17)* because this is a poor neighbourhood. If I were to be operating in a wealthy community, I would have sold it between ¢100-150 cedis (*US$ 18-28*) and they will buy. In this community, if you sold it at that price no one will buy, the medicine will be in the shop till it expired *(Bra David, Pharmacist).*

In contrast, Sister Kate whose shop was in a community which was comparatively wealthier than that of Bra David's, said that:

> I sell the combination therapies like *X-pill* and *medabon* for between 150 and 250 cedis(*US$28-46*) *(Sister Kate, Dispensing technician)*.

Bra Jack however made very good profits from his involvement in abortion provision. He spoke of the possibilities of capitalising on the desperation of prospective clients to make more money. The abuse of desperation to determine service cost is not unique to Bra Jack, many Ghanaian traders operating their own small businesses use this strategy:

> If you buy it from the woman who distributes the medicine, the box contains 10 packs andshe sells it for ¢200 cedis (*US$ 40)* but by the time you finish selling that box you will get about ¢1000 cedis (*approximately US$185)*. That is the least or the minimum amount you get if you do not want a lot of profit. If you want to make good money you can make it pricier, and they would buy. Most women who come needing abortions are desperate to get rid of the pregnancy and so are very willing to pay any amount of money you mention as long as they get their hands on the abortifacients to help them take the pregnancy out *(Bra Jack, Dispensing technician).*

A similar statement about prioritising economic benefits over concern about women's health was shown by other pharmacy workers. Bra Dan, for example, assessed how well dressed a client was to determine their status of wealth and the pricing of an abortifacient:

> … usually I look at the person coming to buy; if the person appears rich, which I determine by how she looks and the kinds of clothes she has on, I increase the price a bit. The minimum amount you would get for Medabon here is ¢100 cedis (US$19) *(Bra Dan, On the job trained).*

Bra Henry, instead of showing concern for the welfare of women he provided services to, expressed the dominant negative community attitudes and raised his charges as punishment to women for engaging in an act deemed anti-social and anti-female:

> …I sell Medabon between ¢80 and 200 cedis *(US$15-37)* based on appearance of the client.Sometimes I even sell it higher than the amount mentioned. I want them to pay through the nose so that it will be a lesson to them (Bra *Henry, On the job trained).*

Herb sellers revealed instances where they similarly increased the prices of abortifacients astronomically. Sister Hannah reported hiking the prices of her abortifacients as a rationale to discourage women from undergoing abortions:

> …*Gyiwahome (herbal abortifacient)* is ¢5 cedis (*US$ 1*), but because I do not want them tobuy, as having an abortion is bad, I sometimes increase the price and sell it between ¢50- 100 cedis (US$ 9-19) to deter those without the money from undergoing the abortions *(Sister Hannah, Herb seller).*

Aunty Elizabeth's initial unwillingness to disclose the cost of her services may have been due to her embarrassment at engaging in an act considered anti-social and also profiting from it:

> It depends on the herbs I give you. After the abortion has occurred there are herbs to increase blood flow if you want that as well. It is more expensive than those who want itfor just the abortion *(Aunty Elizabeth, Herb seller).*

At the community level among informal abortion providers, in addition to, reporting misogynistic and judgmental negative attitudes towards the women they served, they also exploited them financially. Formal abortion providers, however, were more rational and empathetic.

Formal abortions, gestational age and cost

Among formal abortion providers, gestational age at presentation was a major factor used to determine abortion cost. Most reported charging two hundred cedis (¢200) as the minimum cost for providing abortions. Use of gestation to determine cost of service is influenced by provider awareness of the increased risk of complications in terminating pregnancies at higher gestations.

Dr John, for instance, commented that:

> It depends on the duration of the pregnancy; based on how far the pregnancy has progressed, I charge between ¢200- ¢1000 cedis (approximately US$45 - $225) *(Dr John,General practitioner).*

Some formal abortion providers were, however, unwilling to disclose the cost of their services. This may have been due to concerns about being labelled for offering abortions for money. Dr Seth (when asked about their service costs) for example said:

> …I do not think that is important *(Dr Seth, General practitioner).*

Whereas Aunty Vida:

> …*smiled (*and refused to answer the question) *(Aunty Vida, Midwife).*

I did not, however, obtain estimates of the cost of treatment for post-abortion care or how much women who reported to hospitals with unsafe abortion-related complications, spent on their treatment. This was because the treatment for women who reported with complications of unsafe abortions was dependent on the treatment each woman received, and the amount of money she spent varied based on the severity of her complication and her length of stay in the hospital. Formal abortion provider views on how the community's religious beliefs and practices impacted the kinds of abortion women had and on their work as abortion providers is discussed next.

5.4 Religion and induced abortion

Religious beliefs increased abortion-related stigma and made the desire for secret abortions more important than the safety of the procedure. Aunty Harriet, for example, emphasised that women needing abortions tended to avoid hospitals because they felt exposed. She indicated that women were more concerned about secrecy than safe abortion, so no one finds out they had breached the tenets of their Christian faith:

> …it is because of our society. We are very religious, so people are not comfortable with such things, they do not want others to find out. I think it is because of the way the thing isperceived as wrong by their religion *(Aunty Harriet, Midwife).*

Another formal abortion provider commented on how religious precepts around the immorality of abortion acted as a barrier and denied women access to safe abortion care:

> …Most of our women know that they can come to the hospital for safe abortion, but they would not, with our Christian life. We think we are so Christian that the thing is wrong *(AuntyVida, Midwife).*

The need to appear strong adherents of the Christian religion was illustrated by another formal abortion provider as an important factor making women opt for secret abortions which were often unsafe:

> …the more Christians than Jesus. They pretend so much and hide to have abortions, so noone finds out *(Aunty Jane, Physician assistant).*

There were instances where religious leaders were found to exhibit hypocrisy in that while they admonished their adherents about the immorality of abortions, which made some opt for secret unsafe abortions, they sought and arranged for safe abortions on behalf of men's reputation:

> … A man came to me some time ago…he was a pastor from all indications, I could see thathe was a pastor. He came to tell me his church member had impregnated someone and wanted it aborted to avoid disgrace. He was sweating like something; if your church member impregnates someone is that something that should be a cause of worry to you. …I said I will do it for you, to save you and save the girl he knelt to thank me *(Aunty Marian, Midwife).*

Providers also mentioned situations where they had to divulge their own religious identities and use it as a means of comforting women who felt they had behaved contrary to the laws of God, by explaining the need to sometimes reconcile religious beliefs with undergoing abortions:

> …a client we worked on while doing the procedure she was crying; I asked what the problem was, she told me by having an abortion she had sinned before God. I… told her to remove that thought from her mind and that what about those of us providing the service, we would have equally been sinning, but we feel by providing the service we are saving lives. I made her aware that we all attend church but see it as a lifesaving activity *(Aunty Joyce, Public health nurse).*

Aunty Joyce further spoke of situations where women who sought safe abortion had gone to hospitals, but were denied the service due to the health care workers' religious beliefs against abortions. Her statement below highlights that some individuals act as gate-keepers to the service:

> Maybe the day you went you unfortunately met a health personnel who is a Christian; upon seeing her, thinking she is a health personnel you tell her your

> problem and your desire for an abortion. If she reprimands you in a rude manner for desiring an abortion, her action will put you off from going to another hospital for fear of a similar or a worse reaction. Some of them, the words they use in reprimanding patients will make you regret going there and to avoid something like that the women end up going to the drug store. I think the attitude of the health staff is a contributory factor. A lot of them do not treat patients well, most are very rude to patients they can really manhandle you and it would put you off from going to another hospital (*Aunty Joyce, Public health nurse).*

Dr John also spoke of instances where colleagues had refused to be involved in abortion provision, as it conflicted with their religious and moral inclinations. He however rationalised his involvement in abortion provision by seeing it as part of his work as a medical doctor:

> … sometimes some doctors will say their religion and conscience would not allow them toperform some of these procedures… but it is not a big issue to me. It is only being done as a profession *(Dr John, General practitioner).*

Another expressed the view that conscientious objection was common:

> … because of their religious beliefs and other things, he is not comfortable, she is not comfortable, being involved in providing abortions… I think the main problem that prevents some doctors from getting involved in abortion provision is the religious and the moral aspect *(Dr Seth, General practitioner).*
>
> But in contrast, compassion can prevail:
>
> …when you need help during service provision there are some colleagues who refuse due to suggestions of it being against their religious views. I am a Christian and a Catholic, but I see it as a way of saving lives *(Aunty Charlotte, Midwife).*

At the community level, religious influences and associated stigma affected women's access to safe abortions. To avoid the possibility of being stigmatised for having engaged in an act against the tenets of their faith, women were more concerned about secret and anonymous, rather than safe abortions. Abortion related stigma at the community level and how it influenced where women sought care was also discussed with the formal providers.

5.5 Stigma - a barrier to safe abortion care

At the community level, formal abortion providers identified varied ways in which abortion-related stigma influenced abortion decisions. Aunty Mary recounted how the location of their facility exposed women to the possibility of suffering internal stigma and led to situations where they chose to arrange and provide abortions at odd hours:

> …*hmmm* for those who know that they can get safe abortions here, they would hide and secretly come. To protect them and prevent others from finding out about their abortions,we sometimes arrange with them and must be here as early as 5:30am, so we can provide the service as most community members would not be awake by then. …you know the situation of the facility. We are in the middle of the community and people know that we provide abortion, so anyone who comes here, even for family planning, they gossip about the person… generally the people around have been gossiping that the only thing we do here is abortions *(Aunty Mary, Midwife).*

Others expressed concerns that the possibility of being identified and suffering both internal and external stigma for undergoing abortions. This concern was reported to have led to situations where women avoided such facilities:

> …they do not come. They know that we provide the service here so irrespective of what the person came to do immediately, they see the person here then they conclude that she came in for an abortion *(Aunty Jane, Physician assistant)*.

Similar views of women opting for unsafe abortions to avoid stigmatising attitudes from others was mentioned by Aunty Charlotte:

> I think it is community perceptions and attitudes …people want to hide and do in private, so no one finds out. Some feel shy and try to self-induce rather than come to the hospital.Up till today some women use whatever substance they have heard can be used for abortions (*Aunty Charlotte, Midwife).*

The desire of women to avoid experiencing both internal and external abortion related stigma was evident from formal abortion provider discourse. Due to the significant community role formal abortion providers play in increasing access to safe abortion care, providers were also asked ways in which abortion-related stigma directly impacted them.

5.5.1 Stigma and safe abortion provision

Formal abortion providers spoke of experiencing both internal and external stigma for providing abortions. They mentioned being stigmatised by friends, members of the community where they worked, women they had ever provided services for, and by some work colleagues. Aunty Harriet, described being labelled by friends as 'a murderer' for providing abortions. Aunty Harriet's experience of labelling and external stigma emanated from the dominant discourse in most Ghanaian communities where people who provide induced abortions are placed in the same category as murderers:

> … I have some friends when they see me or sometimes, when they call and they will be likethe greeting they will give me is '*today how many people have you killed'.* …some will tell me *'will you not stop killing people' (Aunty Harriet, Midwife).*

Another formal provider related an instance of name calling and the experience of external stigmatising attitudes from members of the wider community:

> … those who live around this facility I have heard that after the close of work when we are leaving for home, what they say is '*look at the abortion people they are* leaving' *(Aunty Jane, Physician assistant).*

Labelling of formal abortion providers by women to whom they provided services emerged as another source of abortion related external stigma:

> … sometimes some of the clients you help, when they see you in town, they point fingers at you. That this is the woman who provides abortions *(Aunty Joyce, Public health nurse).*

Aunty Joyce's sentiment is exemplified in the quote below where 42-year-old Ivy, who was one of the women interviewed for this study, criticised her abortion provider and felt that her inability to have children of her own was her punishment for being an abortion provider and invariably killing other people's children:

> … that woman she was a wicked woman she used to do only abortions. Someone told meshe was more into abortions than delivery as abortions were more lucrative. Because of the bad work she was engaged in I learnt she never had any biological children *(Ivy, Informal sector employed).*

The perception that abortion provision was for a certain category of health care worker and transitory in nature was highlighted by another formal abortion provider. Aunty Mary, for instance, commented on the external stigma and labelling she experienced from a colleague:

> … I attended a workshop and when I introduced myself as being a provider; the facilitators,one of them called and told me that I am too young to be doing this kind of work. She gavethe advice that, I should think about it and after doing it for a while I should stop since it is not a good work. She emphasised that seriously it was a bad work, so I should not do it for a long time … I should stop *(Aunty Mary, Midwife).*

Formal abortion providers' accounts of their experiences of internal and external stigma at the community level revealed its all-encompassing nature. Within communities, the dominant attitudes displayed by community members towards women whose abortions become public may not only influence the abortion decisions women take, but may influence their overall abortion experience, as well as those for the providers themselves.

5.5.2 Stigma and women's abortion experience

The reaction of other community members towards women whose abortions become public is important. This is because it is not just likely to affect their overall abortion experience, but could also impact their physical, social and emotional wellbeing as members of the community. Many women who participated in this study revealed instances where they experienced internal and external stigmatising attitudes from other community members for undergoing abortions. Janice spoke of being shunned by her friends when they found out about her abortion. Abortions are considered anti-female and therefore frowned upon. There are also instances where the friends ofwomen who undergo abortions also experience external stigma:

> My friends when they heard about the abortion, now they don't want to come close to me.Their attitude towards me have changed, I heard from someone they do not want people to think they have also done an abortion (*Janice, student).*

Janet spoke about a sad incidence of the occurrence of an abortion-related death in her community. She highlighted the interest of community members in the lives of others and stressed that to prevent the possibility of experiencing internal stigma (if others found out about your abortion), a hospital-based termination was the best. This she rationalised, was due to the reduced possibility of experiencing a complication, which increases the probability of being stigmatised if others know that you have had an abortion:

> Just about eight months ago a young girl in my community died from an abortion she triedto self-induce. As for Ghanaians we like talking whatever you

> do, you will get someone to say something about it. The best thing is to come to the hospital and do it, than going to self-induce, which could create problems *(Janet, Unemployed)*.

Florence mentioned that community members often cast aspersions at women whose abortions became public. She highlighted the fact that such women become the object of gossip by other members of the community for transgressing both community and gender norm expectations assigned to women:

> …people will point fingers at you and gossip about you that abortions are all you do. Somewill also tell you to the face that if they were in your situation, they will never have had anabortion and that they would have preferred feeding their children stones if there was no money for food than to opt for an abortion *(Florence, Informal sector employed).*

On the other hand, Matilda argued that women whose abortions become public often experience external stigma and chastisement from other members of the community on why they did not prevent the pregnancy:

> …some will ask, why did you not use contraception to prevent the pregnancy but rather opted for an abortion. A lady died in my community about three months from the complications of an abortion, that is what most people said *(Matilda, Informal sector employed).*

Interactions with pharmacy workers also revealed that the desire of women to prevent being stigmatised led to situations where some bought abortifacients when they were least likely to be identified by others. Bra Harrold for example said that:

> If you can wait till around 9:00pm to 10:00 pm you would see them coming to buy themedicine… often they come to buy in the evenings when its dark (*Bra Harrold, Pharmacist).*

> …they often come to ask for such medicines in the evening they rarely come during the day…they come under the cover of darkness *(Bra Henry, On the job trained).*

Women's and providers' narratives showed the significant impact that both internal and external stigma can have on their abortion related experiences.

5.6 Summary

At the community level, abortion related stigma was an all-pervasive phenomenon that affected women and providers in diverse ways. Among women in this study, both internal and external stigma acted as barriers preventing them from accessing safe abortion care. In women's desire to reduce the possibility of being stigmatised, most used the services of informal abortion providers due to the greater privacy and anonymity they thought it afforded. This notwithstanding, most informal abortion providers (especially male pharmacy workers) stigmatised, labelled and financially exploited women who sought their services as a punishment for breaching their normative gender expectations. Abortion related stigma also extended to the providers, though informal providers did not highlight their experiences of stigma, which may have been due to their awareness of the illegal nature of their service, this was not so for the formal providers. Formal providers reiterated instances of being stigmatised by both colleagues and other people within their social network. The need for targeted interventions to reduce and overcome the barrier of abortion related stigma is therefore important. In the following chapter (6), I present societal level influences on the abortion- related experience of women and abortion providers.

Chapter 6: The Ghanaian societal context and induced abortions

The previous chapter illustrated ways in which community influences impacted on women's and providers abortion related experiences. This chapter presents societal level influences on the abortion related experiences of providers and women. I begin the chapter by exploring the knowledge of Ghanaian abortion law by providers and women. Formal abortion providers' and pharmacy workers' perspectives on the law and how it impacts women's access to safe abortion care is also explored. The chapter continues with a discussion of formal abortion provider views on where women access abortion care. The rest of the chapter is devoted to an examination of the Ghanaian pharmaceutical industry, with particular emphasis on the regulation and monitoring of medical abortifacients. Narratives presented in this chapter reflect how these contextual issues within the broader Ghanaian society also shape the kinds of abortions women have.

6.1 Ghanaian abortion law

In response to the high incidence of unsafe abortion related morbidity and mortality experienced by Ghanaian women, the Ghanaian government amended its laws governing abortions in 1985. As previously discussed in chapter two, abortions are now legally permissible in Ghana, if the pregnancy resulted from rape, incest or could endanger the physical or mental health of the woman. Abortions are also legally permissible if there is a risk of foetal abnormality (Guttmacher Institute, 2013; Morhe & Morhe, 2006). I start the section with a discussion of formal abortion provider knowledge of Ghanaian abortion law.

6.1.1 Formal providers

At the societal level, most formal abortion providers in the study, either liberally interpreted abortion as legal without justification to reason or lacked specific knowledge of the grounds under

which women could access safe legal abortions. Reporting that women could request legal abortions without justification to reason, some said:

> …I know it is now legalised, so, you can walk in for an abortion. But you sign a consent formso that if any legal issue sets in it will be a proof that the woman opted for the procedure herself *(Aunty Mary, Midwife).*

> Because it is legalised now, if the woman walks in, whatever reason she has, since it is her right after counselling her on the various options including the possibility of keeping the baby and maybe giving it out for adoption. If she is not interested in any of these options, itis her right *(Aunty Vida, Midwife).*

Others stressed the importance of carrying out the procedure in a hospital:

> …you should not refuse anybody, but you will not have to take the person to just anywhere and do it *(Aunty Marian, Midwife).*

Apart from these providers, there were others who did not know the specific conditions under which women could access legal abortions. However, their uncertainty about the law did not prevent them from providing the service. Dr Seth, for example, chose to compare the Ghanaian abortion laws with what pertains in some high-income countries:

> …our law has not established it fixed that you can go for abortion like it is in the UK and the US. In some countries like Russia, if you are pregnant you just walk in and have it terminated, but ours is not like that *(Dr Seth, General practitioner)*.

In contrast to the majority, there were a few formal abortion providers who had knowledge of conditions under which safe legal abortions are allowed:

> … the only situation where abortion is legal is when there is an incest, rape or the pregnancy poses a threat to the health of the woman *(Aunty Jane, Physician assistant).*

> It is legal when the pregnancy affects the physical or the mental health of the woman, butit has to be done in a hospital *(Aunty May, Midwife).*

Among the formal abortion providers who demonstrated knowledge of the Ghanaian abortion laws was Aunty Joyce. Aunty Joyce had a thorough knowledge of the abortion laws and was able to indicate all the conditions under which women could secure legal abortions in Ghana. She further explained how she interpreted the law to make every pregnancy she terminated legal:

> The law has some exemptions under which abortion could be done legally. They are foetalabnormalities, rape, incest, maternal illness and mental health. Under mental health; I understand it as not only related to someone who is mad. Maybe the person is in school and gets pregnant, psychologically she is not sound and you know the definition of health is not just merely the absence of disease… If someone is in school and gets pregnant her education will be curtailed, when I get such a client I capture it under mental health, so that the termination becomes legal. Some of them too their parents might be pastors andthey end up becoming pregnant; this is disgraceful and shameful to the parents and bringsa lot of tension in the home. Such a person when she comes, I also place it under mental health and do it for her legally… so mostly the clients are captured under mental health *(Aunty Joyce, Public health nurse).*

Among formal abortion providers who participated in this study, although many did not have a thorough knowledge of the Ghanaian abortion laws and the conditions under which women could have their abortions legally terminated, they acted pragmatically by providing the service to women. I next discuss formal abortion provider views on whether the law impacts access to safe abortions.

The law and access to safe abortions

Some formal abortion providers called for legal reforms to the Ghanaian abortion law. This they argued was necessary in that the law as it currently stands is surrounded with ambiguity. Arguing for legal reforms, Dr John suggested that the current abortion law did not give the provider the needed power to offer the service, but instead hindered access to both abortion care and provision:

> The laws are not favourable; they are not at all. I think a lot can be done in that aspect. Some proper laws and bye laws should be made so that if maybe somebody is pregnant and does not want it, she can go freely to the hospital to abort it to avoid the complicationthat could happen after a self-induction. So I think the laws are not favourable for both thepractitioner and the patient *(Dr. John, General practitioner).*

He further commented that how access to legal abortions is couched in the Ghanaian laws is to be blamed for how services are provided. He argued that both women and providers would have been comfortable to openly provide or access the service had it been emphatically stated in the laws that women could undergo abortions without justification to reason:

> I think it is because the law does not support the thing perfectly, that is why people do notdo it in a right way. …if we have laws that support it, that if you are pregnant and you do not want, it you can go to the hospital and abort it, you the practitioner and the patient will feel free *(Dr John, General Practitioner).*

Others spoke of the need for legal reforms on the basis that women whom they provided services too did not qualify for legal abortions:

> …the only situation where abortion is legal is when there is incest, rape or the pregnancy poses a threat to the health of the woman, but they are not those conditions that clients wanting an abortion mention. When they come, and you interact with them, they have not been raped, it is not incest they just do not want to keep the pregnancy… so I think it should be reviewed. They should make it in such a way that anyone who is of a sound mind and above eighteen can access abortion care when the need arises *(Aunty Jane, Physician assistant)*.

In contrast, a few argued that the current law was satisfactory. Dr Seth, said:

> I think for Ghana it is strict and liberal enough; it is strict enough to prevent quacks and clients by themselves causing illegal abortions. But liberal enough for trained health personnel to perform it. This means it is not the client who must come to tell you I want anabortion, but per your assessment as a medical doctor you know that this patient requires an abortion based on the law *(Dr Seth, General practitioner).*

Others highlighted the lack of influence/knowledge of the abortion laws:

> …there are some who when it was not legalised, they did not know and since it became legalised, they do not know that as well… all they know is they are pregnant. They try other things and come with complications *(Aunty Charlotte, Midwife).*

> The general population apparently to me is not knowledgeable about the laws governing abortions… a lot of people around use whatever to cause abortions. …the laws on abortions people are not very aware of it even from medical practitioners *(Dr Seth, General practitioner).*

The view that post-abortion rather than safe-abortion care is provided in most Ghanaian hospitals was reported by others:

> … some still have that perception, that to access abortion care in hospitals, you must attempt it and if it fails then you come and we will help you *(Aunty Mary, Midwife).*

Some argued for the need for awareness creation about the existence of the law:

> I think most women do not know that there is even a law regulating abortion in the firstplace…knowledge about the law is very low. Maybe some public education on it would really help *(Dr James, Gynaecologist).*

A majority of formal abortion providers who participated in this study saw the current abortion law as a hindrance to both abortion provision and access, they therefore recommended the need for legal reforms and community awareness as a way of improving abortion access. Apart from formal providers, I also asked the views of pharmacy workers about the law.

6.1.2 Pharmacy workers

Pharmacy workers who participated in this study generally alluded to being involved in an illegal activity. This notwithstanding, little knowledge of the Ghanaian abortion laws and conditions under which women could access legal terminations was demonstrated by them. Among the pharmacy workers, only Sister Kate, showed some knowledge of law:

> …if maybe the pregnancy resulted from rape or maybe it could harm the health of the pregnant woman *(Sister Kate, Dispensing technician).*

Many chose to highlight the illegal nature of abortion provision by pharmacy workers:

> The law does not allow the sale of such medicines in pharmacies *(Bra Harrold, Pharmacists).*

Others added that women could access post abortion care instead of safe abortions:

> …it is not allowed in pharmacy shops; it is just that we are not following the laws regulatingit and we dispense the medicines to women. At the hospitals too umm let's say if here is a hospital they will only do it, if the person tries it in her own and there is problem. So if maybe they do not do it, it means the person can die, that is where they will do the abortion for you. But you cannot go to the hospital and just say that I am going to do an abortion no *(Bra Jack, Dispensing technician).*

Some seemed uncomfortable talking about their activities and therefore giggled often as a coping mechanism. This act could have been prompted by the stigma associated with being an abortion provider within the Ghanaian context. Sister Alice, who seemed a bit embarrassed, giggled and suggested that abortion had been legalised, so women needing terminations could present themselves in any hospital to request for the service:

> … giggle… I think now the laws have been changed and you are free to walk into anyhospital to personally seek for abortion *(Sister Alice, Medicine counter assistant).*

Despite a lack of knowledge about the Ghanaian abortion laws, most pharmacy workers acknowledged that their dispensing activities were illegal. I therefore explored ways in which they managed their practice knowing that it was illegal.

The law and pharmacy provision of abortion

Most pharmacy workers in the study used discretion and caution in their practice to avoid the attention of law enforcement authorities. Some said:

> … it is a bit risky…as you cannot tell when the police might come or send someone, and you could be arrested. Umm the truth is that society frowns on it, so they can use any excuse to bring you problems *(Sister Kate, Dispensing technician).*

Others commented on assessing the risk levels of prospective clients before dispensing abortifacients:

> Umm the law…giggle… I know it is illegal … I have stopped dispensing it so much like how I used to. Now I really interview the women before I give it out *(Bra Harrold, Pharmacists).*

Some reported that due to the nature of their practice they had no reason to worry about possibility of arrest:

> …if you know that maybe the drugs you are dispensing are deadly or expired then youwould be worried…I always advise them to quickly go to the hospital should they experience any problem *(Bra Henry, On the job trained in pharmacy).*

In contrast, a few highlighted the importance of their service and defended their competence:

> … the demand is very high so I am just helping them, besides if you follow my advice there is no way there would be problems *(Bra Jack, Dispensing technician).*

In summary, pharmacy workers' awareness of the illegality of their activities led to the adoption of practices which would not draw the attention of law enforcement authorities. Herb sellers were another group of informal providers, who were asked about their knowledge of

abortion laws.

6.1.3 Herb sellers

Herb sellers were asked what they knew about the abortion laws. A decision not to probe further on issues concerning the law was made after observing the unease shown by participants when questioned about the law. This ill-ease among herbal abortion providers may have been influenced by their awareness of the stigma attached to abortions and the risk of arrest for people who provide it. Sister Hannah commented:

> …it is illegal, I know that you are not a police officer and so will not arrest me that is why Iagreed to participate (*Sister Hannah, Herb seller).*

Another said:

> …umm you must go to the doctor if you want to do something like that *(Sister Elizabeth,Herb seller).*

In contrast, the only male provider among the herb sellers highlighted the usefulness of his service:

> I know it is illegal umm, but the women come to ask for it and I must help them *(Bra Moses, Herb seller).*

Like the pharmacy workers, herb sellers highlighted the illegality of their practice. Given that induced abortions are accessed by women, I asked women participants what they knew about the Ghanaian abortion law.

6.1.4 Women's knowledge of the abortion law

A majority of women in the study had no knowledge of the abortion law. This could have been due to the low levels of formal education among them. Nancy who had no formal education for instance said:

> Please I have no idea *(Nancy, 18-year-old, unemployed).*

In response to her knowledge about the law, Faustina, instead chose to highlight the risk associated with unsafe abortions. Her assertion gives credence to suggestions by some pharmacy workers on the need for legal reforms to sanction their involvement in abortion provision:

> Umm the hospital is the best place for such things. At the pharmacy shop you could be given the wrong medication if maybe the person you meet is not the owner of the shopumm look at me, I could have died *(Faustina,27-year-old, Informal sector employed*).

Barbara similarly showed ignorance about the abortion laws:

> …I thought it was illegal or something. umm I do not know whether it has now been legalised *(Barbara, 23-year-old, Formal sector employed*).

Janet, who was having her second abortion did not only suggest that abortion had been legalised but reported the reasons for its legalisation:

> I have heard that when someone is raped the law allows for a legal termination. I learnt the government has now legalised abortion and you can terminate it if you are not readyfor it. I heard it is to prevent situations where women needing abortions are turned away from the hospital and because of desperation they go and take all kinds of medications that could lead to their death *(Janet, 22-year-old, unemployed).*

Most women showed little knowledge about the Ghanaian abortion law. Nevertheless, they acted pragmatically in ending their pregnancies by using any means and seeking treatment from hospitals after the experience of an abortion related complication.

6.2 Access to safe abortion care

Women's ability to access both induced abortion and post-abortion care within the formal health delivery system, is important in safeguarding their health. Access to induced abortion care, however, could be affected by both the expected codes of behaviour within the health care system and the larger Ghanaian society. Responding to questions about whether women accessed abortion care directly from hospitals or presented with abortion-related complications, many providers expressed the view that:

> …it is often the last resort… most who come here have tried and it failed. They use things like herbal bitters, coke with sugar, glass which has been grinded, Cytotec *(misoprostol)* is also very popular among them *(Aunty Charlotte, Midwife).*

…their first point of contact is the pharmacy shops. Most who come here have already ingested something in their attempt at aborting the pregnancy. When you ask them, they mention I bought an abortifacient from the drug store and it failed *(Aunty Joyce, Public health nurse)*.

In contrast to the majority view, a few said:

> It is fifty, fifty. Some come here straight others too they do some other things before they come. They take certain drugs and other things and when they see it is still not coming then they come *(Aunty Jane, Physician assistant).*

> …some come directly, others come with incomplete and we complete it for them *(Dr John,General practitioner*).

Formal providers perceived that women mainly presented for post abortion, rather than safe abortion care, I therefore explore their views on barriers to care.

6.2.1 Barriers to safe abortion care

Formal abortion providers revealed conditions within larger Ghanaian society that prevent women from seeking induced abortion care from the formal health service. Issues like women's lack of knowledge about the abortion law, the cost of safe abortions and the distance women must travelbefore they can access safe abortion care were identified. I start with a discussion on provider views on how women's knowledge about the abortion law influenced their access to care.

Lack of knowledge about the abortion law

At the societal level, despite policy changes broadening the grounds under which Ghanaian women can access safe abortions, there seemed to be a general lack of knowledge about the abortion law. Among Ghanaian women within the reproductive ages, who are at higher odds of needing the service; not knowing their right to safe abortion care could result in situations where they endanger their lives and health by accessing the service from unsafe places. Aunty Mary commented that:

> I have realised that most even do not know that if you walk to the hospital, they will do itfor you…they therefore try to do it on their own. Most have no idea they can be helped here *(Aunty Mary, Midwife).*

In addition to women's lack of knowledge about the laws, their poor economic background denied also them access to safe abortion care.

Cost as a barrier to safe abortion care

Formal abortion providers perceived that the cost of safe abortions sometimes prevented women from accessing the service. Aunty Joyce, commented that:

> …some of the providers charge exorbitantly. This makes women prefer the drug store sinceit is cheaper. Maybe the medication from the drug store will cost her only 70 cedis, while ifshe had opted for a hospital-based termination the least amount she would be charged is 200 cedis. Many go and buy the drugs from the pharmacy shops and it works for them, those are the lucky ones *(Aunty Joyce, Public health nurse).*

Others stressed how poor finances contributes to unsafe abortions:

> …the means to come here, it comes with a cost and they do not have the financial meansto come so they will not come. They discuss with a friend who might suggest a medicationwhich is just 10 cedis but can abort the pregnancy if they are lucky *(Aunty Jane, Physician assistant).*

Sometimes not having money to pay for terminations did not only act as a barrier to safe abortion care, but also resulted in women delaying care, as they had to save up to get the needed money for the abortion. This practice leads to terminations at higher gestations, which is associated with more health risks for the woman:

> …she might hear from someone that we charge 200 cedis so she will sit at home and save till she gets the 200 cedis or use an unsafe means which is cheaper (*Aunty Mary, Midwife).*

There were also instances where women who wanted to have safe terminations and therefore went to hospitals to enquire, were turned away because they did not have the needed money to pay for the service and were unlucky to have met the 'wrong' medical personnel. Aunty Charlotte said:

> …I have just remembered a sad incidence of a young girl whom we lost. She took various concoctions in her attempt to end a pregnancy and was rushed in here bleeding profusely but died. It was after she died that the sonographer working with us mentioned that the girl came to enquire from him about the cost of an abortion and he mentioned the charge.He said the girl told him she had only 30 cedis and asked whether it was possible for her to still access the service. He told her to go and raise the additional money and then come. Since the girl could not raise the extra money, she opted for the cheaper option which led to her death. I told him he should have let her come, we would have done it for her *(Aunty Charlotte, Midwife).*

Aunty Charlotte's narrative does not simply highlight how finances could deny women access to care, but also shows ways in which women could equally be denied induced abortion care as a result of negative provider attitudes. The closeness of pharmacy shops to where women live was also identified by providers as making some women prefer their services over that of hospitals.

Convenience and proximity of pharmacy shops as a barrier to safe abortions

A majority of hospital-based providers mentioned that many Ghanaian women chose to access abortion care from pharmacies instead of hospitals. Ease of access, anonymity and the fast nature of services was reported as a major incentive for women choosing to access care from pharmacies. Aunty Joyce, commented that:

> …the pharmacy shops are located everywhere, so it is just a walking distance from their homes to the shop *(Aunty Joyce, Public health nurse).*

Others said:

> …they just go to the drug store to buy abortifacients than the hospital, where they wouldhave to go through the process of getting a card, folder and waiting their turn to see the doctor…. with the pharmacy it is faster you just go buy and you are off *(Dr John, General practitioner).*

Formal abortion providers identified women's lack of knowledge about the abortion law, high cost of safe abortions and the inconvenience associated with safe abortions as preventing women from accessing abortion care in hospitals. Among pharmacy workers in this study, their reports showed that abortifacients dispensed to women were sourced from a variety of reliable and unreliable sources.

6.3 Source of abortifacients in Ghanaian pharmacies

Pharmacy workers who participated in this study revealed that most sourced their abortifacients from both legal and illegal sources. The ability of pharmacy workers to freely dispense abortifacients acquired from uncertain sources without worrying about the quality of the abortifacients, *and possibility of punishment from law enforcement authorities* was troubling. Bra Harrold commented that:

> …it is from "connection" (from illegal sources) sometimes I get it from my classmates, but mostly it is from a neighbouring country. We also have some companies like DA and DP pharmacy you can get meffikit *(misoprostol +mifepristone)* from them (*Bra Harrold, Pharmacist).*

> I buy it on the black market from some boys from our neighbouring countries. I also sometimes purchase it from the big pharmacies in town *(Bra Dan, on the job trained).*

Another said:

> …some ladies have been supplying me the abortifacients. … they have not told me where they get the supply from. They know if I become aware, I might end up buying directly from them. One thing about abortifacients is that it is always in demand, people always getpregnant and need abortions. The demand is very high, if she tells me her business will be ruined *(Bra Jack, Dispensing technician).*

In contrast, a few of the pharmacy workers spoke of buying their abortifacients from large pharmaceutical companies:

> …it comes around in vans and they move from shop to shop asking those interested in buying *(Sister Kate, Dispensing technician).*

The lack of knowledge by most pharmacy workers about the source of abortifacients dispensed means the quality of their abortifacients cannot be verified. This can lead to situations where sub-standard, fake and expired abortifacients are dispensed to women, increasing the possibility of failed and incomplete abortions. Due to the laxity in regulation, people with no form of pharmacy training were also involved in dispensing medical abortifacients.

6.4 Others involved in illegal medical abortions

Due to the lack of regulatory measures and monitoring mechanisms in controlling who can or cannot provide abortions, various people with no training in dispensing medication abortions were also found to be dispensing abortifacients. Sister Alice said:

> …the young girls. If a friend wants an abortion, they come to buy the medicine and sell at a higher price to them. There are times where they even come all the way with the friend, but tell them to wait outside the shop while they come in to get the medicine, so the frienddoes not get to know they have been cheated *(Sister Alice, Medicine counter assistant).*

The ill regulated manner of medication abortion provision in Ghana has led to situations where high numbers of women experience abortion related complications. At the time of these interviews, the pharmacy providers who participated in the study mentioned that in a bid to clean up the sale of medication abortion, a ban had been placed on the sale of Medabon *(misoprostol+ mifepristone)* which they stressed was the most popular abortifacient on the Ghanaian market.

6.5 Regulation of the sale and distribution of medication abortifacients

The ill regulated manner of medication abortion provision in Ghana has led to situations where high numbers of women experience abortion related complications. At the time of these interviews, in a bid to clean up the sale of medication abortion, the pharmacy providers who participated in the study reported that a ban had been placed on the sale of Medabon (misoprostol+ mifepristone) which, according to some pharmacy workers, was the most popular abortifacient on the Ghanaian market. Sister Kate commented that:

> …Medabon *(misoprostol +mifepristone)* is becoming increasingly difficult for one to get itnowadays. I learned the Food and Drugs Authority (FDA) have placed a ban on it due to abuse, so it is now not on the market. Initially you could get some everywhere and all manner of people were involved its sale. Could you believe even *'kayayei'* (women who carry people's shopping for a fee) were selling it in the markets *(Sister Kate, Dispensing technician).*

Another pharmacy worker expressed the view that the ban on the sale of abortifacients has led to situations where the manufacturers have found new and ingenious ways of being in business despite the ban:

> … due to the ban by the FDA on *medabon (misoprostol + mifepristone)* it is now very scarce and there is none in the system. I learnt a new one is in, it is called *mefabon (misoprostol + mifepristone).* Someone just called me that he has some in stock so I could come and buy. …because of the government's ban that is why the manufacturers have changed it from *medabon* to *mefabon* it is the same thing *(Bra Harrold, Pharmacist*).

6.6 Summary

At the societal level, the abortion decisions of women were influenced by a combination of their complete lack or poor knowledge of the abortion laws and environmental influences. Not knowing about the abortion laws influenced women's decisions to access care from unsafe sources, and only report to the formal health care system after experiencing complications.

Women's concern about experiencing internal and external stigma from both health care workers and members of the wider society, should their abortions become public, also influenced these participants to avoid care from the formal health care system. Additionally, the difficult financial conditions of most women and the high costs of formal, but safe abortions precluded most women in this study from accessing safe abortion care. This resulted in their reliance on cheaper alternatives from pharmacy shops, which were more accessible. Regulation of the Ghanaian pharmaceutical industry, especially its distribution of medical abortifacients was poor, leading to situations where the source and the quality of dispensed abortifacients could not be determined. Consequently, this lack of regulation endangers the lives of women who use pharmacy medications. To further enhance an understanding of induced abortion by Ghanaian women, the following chapter outlines an audit of the health records of women who sought post abortion care in a non-governmental health facility.

Chapter 7: Quantitative data using health records

While the previous chapter explored factors at the societal level of the ecological model on unsafe abortion, in this final findings chapter, I present data from a clinical audit of hospital records of an NGO operated health facility. The chapter describes the association between women's socio-demographic characteristics, contraception, type of abortion and complications experienced over a one-year period.

The use of health records from an NGO operated health facility highlights the poor quality of records at the public health facility study sites where I conducted interviews. Though I had initially planned on using health record data from the public health facility study sites where I gathered interview data, an examination of the available health record data revealed they were not detailed enough and therefore inadequate to allow for detailed statistical analysis, or to answer my research questions. Data presented in this chapter were therefore collected from the health records of women who sought induced abortion care from a non-governmental (NGO) hospital, located in the Ashanti region of Ghana between January and December 2017. I have used descriptive and inferential statistics in reporting and outlining relationships within the data. Through secondary data analysis, I aimed to answer the following questions:

a) What are the socio-demographic characteristics of participants sampled?

b) Among the study sample, who had ever used a method of contraception before accessing care?

c) What characteristics were more prevalent among women presenting for safe/unsafe abortion care?

d) What were the characteristics of women who had complications from an unsafe abortion?

I begin the chapter by first presenting descriptive summaries of the data including the socio-demographic characteristics of all women sampled. The final section of this chapter describes the relationship between women's socio-demographic characteristics and contraception use and abortion methods/complications.

7.1 Socio-demographic characteristics

The health record data showed that a total of 186 women sought abortion care from one NGO providing abortions in the Ashanti Region of Ghana in 2017. Out of this number, 133 (71.5%) were within the criterion reproductive age of 18-49 years. Women below 18 years were not the focus of this study, as I wanted the ages of the participants to be at par with women interviewed from the public health facility study sites. The demographic characteristics of participants sampled for the study are presented in Table 6.

Table 6: Socio-demographic characteristics of women attending NGO for abortion care (n=133)

	n	**(%)**
Age group		
<20	21	15.8
20-24	53	**39.8**
25-29	25	18.8
30-34	17	12.8
35 or more	17	12.8
Marital status		
Single	116	**87.2**
Married	15	11.3
Divorced/widowed/Separated	2	1.5
Educational background		
No formal	18	13.5
Primary/Junior high school (JHS)	82	**61.7**
Secondary/vocational	24	18
Undergraduate degree	9	6.8
Occupational background		
Formal	16	12
Informal	90	**67.7**
Student	17	12.8
Unemployed	10	7.5
Number of children		
0	85	**63.9**
1	29	21.8
2-3	7	5.3
4 or more	12	9
Total	***133***	***100***

Over half (59%) of the women sampled were in their twenties, when there is a greater likelihood that they are more sexually active. Although most women were unmarried (87%), there were a few married (11%) and divorced women (1.5%) included in the sample. Participants mainly had low levels of education, with over three quarters (75%) having been educated only to the primary or junior high school level. The sample was mostly employed in the informal retail sector (68%) and the majority had no children (64%).

7.2 Type of abortion and complications experienced

Although the focus of this thesis is on unsafe abortions, knowing the numbers of women who present to hospitals for safe abortion is important in highlighting the magnitude of the problem of unsafe abortions. An abortion is termed safe if it is carried out by a trained person using methods recommended by WHO for the pregnancy duration (World Health Organisation, 2003). An unsafe abortion, on the other hand, is the procedure for terminating an unintended pregnancy, either by people without the necessary medical skills, or in an environment that does not conform to the minimal medical standards or both (Ganatra et al., 2017; World Health Organisation, 2007a).

Using data from the health records of the NGO -operated health facility, table 7 outlines the numbers and proportions of women who underwent safe abortion care and those who presented for care post unsafe abortion.

Table 7: Number of women attending NGO by abortion type (n=133)

Abortion type	**n**	**%**
Safe	14	10.5
Unsafe	119	**89.5**
Total	***133***	***100***

Out of 133 women sampled for the study, the majority (89.5%) presented at the hospital to access treatment for complications they suffered after undergoing unsafe abortions. The small number of women who presented for safe abortions highlights the significant numbers of Ghanaian women who rely on unsafe abortions in ending their unintended pregnancies.

Table 8 illustrates the unsafe abortion methods reported by women. These are categorised

into *less* and *least safe* abortions. Abortions are termed *less safe* if provided by trained staff using methods not recommended by WHO. In situations where women use medical abortion without the needed information or support from a trained provider, it is also termed *less safe*. *Least safe* abortions are provided by untrained people, using dangerous methods (Ganatra et al., 2017).

Table 8: Type and method of unsafe abortion (n=119)

Unsafe abortion	**n**	**%**
Less safe abortions		
Misoprostol	67	**56.3**
Misoprostol + mifepristone	36	30.3
Total - less safe	**103**	**86.6**
Least safe abortions		
Herbal or Home remedy	16	13.4
Total - all unsafe abortions	**119**	**100**

The health records showed that most study participants resorted to *less safe* abortion methods using medical abortion (86.6%). From this number, over half used medical abortifacients containing misoprostol only (56.6%), while the remaining used abortifacients which contained both misoprostol and mifepristone. Women suffered a range of complications after undergoing unsafe abortion (Table 9).

Table 9: Complications experienced after unsafe abortions (n=119)

Complication	**n**	**%**
Offensive vaginal discharge	2	1.7
Haemorrhage only	73	**61.3**
Haemorrhage plus abdominal pain	10	8.4
Haemorrhage plus abdominal pain/and or fever	34	28.5

Haemorrhaging resulting from women having retained products of conception was the most common complication experienced, by more than half (61.3%) of the study sample. Almost a third of women had fever and pain accompanying haemorrhage, which can indicate sepsis.

7.3 Comparison of pre- and post-abortion contraception

A woman's fertility can return only a few weeks after having an abortion (Sober, Ratcliffe, Creinin, & Schreiber, 2010). However contraceptive use among this category of women have been found to be low (Salifu & Mohammed, 2020). To prevent the possibility of women experiencing unintended pregnancies and repeat abortions, the WHO recommends the need for contraceptive counselling and method provision to be integrated into abortion care (Singh et al., 2018; World Health Organisation, 2004, 2015). The recommendation also emphasises that to prevent situations where women might not return to receive a method after hospital discharge, contraceptive use can be initiated immediately following either a medical or surgical abortion (Singh et al., 2018). Using the health records, I sought to find out the method of contraception accepted by participants before hospital discharged.

Table 10 shows a comparison of contraception used by the participants before receiving care and the type of contraception they accepted before hospital discharge. Pre- abortion contraception includes the method of contraception that women had used prior to having an abortion. Post-abortion contraception, on the other hand, was the contraception method accepted by women prior to being discharged from the hospital.

Table 10: Pre- and post-abortion contraception (n=133)

Pre-abortion contraception	n (%)	Post-abortion contraception	n (%)
None	101 (76)	None	35 (26)
Oral contraceptive pills	26 (19.5)	Oral contraceptive pills	31 (23)
Injectables	6 (4.5)	Injectables	**53 (40)**
		IUD	5 (4)
		Implants	9 (7)

From the records, only 24% of women had used contraception prior to admission for abortion care, compared to 74% who accepted a method on discharge. The difference between pre and the post abortion injectable contraception accepted by participants was substantial. While the records indicated that just 4.5% of women used injectable before receiving care, the number of women who accepted injectables after care increased to 40%. Also the method of contraception accepted by a majority of the study participants contrasted with that of the GDHS, which is a

nationally representative sample. Whereas a majority of women in this study accepted injectables, and then oral contraceptive pills, that of the GDHS were injectables followed by implants (Ghana Statistical Service et al., 2015). Having presented descriptive health record data on the numbers and proportions of women who sought induced abortion care, I next present data on the associations between these characteristics. I start with an examination of the characteristics of women and their use of contraception before receiving abortion care.

7.4 Pre-abortion contraception

In this section, I present cross-tabulations that I conducted to determine whether there were any statistically significant associations between women's socio-demographic variables and their contraception use or non-use. I examined the association between the socio-demographic variables as the independent variable and women's contraceptive use as the outcome variable. For all analyses, variable associations were reported as significant at a $p \leq 0.05$ (De Muth, 2014; Korosteleva, 2018). See Table 11.

Table 11: Pre-abortion contraception by women's socio-demographic characteristics (n=133)

Characteristic	Method of pre-abortion contraception			Fisher's exact (p value)
	None	Pills	Injectables	
	n (%)	n (%)	n (%)	
Age				
<20	21 (15.0)	-	-	0.012*
20-29	56 (42)	19 (14.3)	3 (2.3)	
30+	24 (18)	7 (5.3)	3 (2.3)	
Totals	**101 (75.0)**	**26 (19.6)**	**6 (4.6)**	
Marital status				
Single	88 (66.1)	24 (18)	4 (3)	
Married	12 (9)	2 (1.5)	1 (0.8)	0.162
Divorced/widowed/separated	1 (0.8)	-	1 (0.8)	
Totals	10 (75.9)	26 (19.5)	6 (4.6)	
Education				
No formal education	12 (9)	3 (2.2)	3 (2.2)	
Primary/JHS	65 (49)	15 (11.3)	2 (1.5)	
Secondary school	20 (15)	3 (2.2)	1 (0.8)	0.035*
Undergraduate degree	4 (3)	5 (5.8)	-	

Total	**101 (75.9)**	**26 (19.5)**	**6 (4.5)**	
Number of children				
0	66 (49.6)	16 (12)	4 (3)	
1-2	25 (18.8)	7 (5.3)	1 (0.7)	0.903
3+	10 (7.5)	3 (2.2)	1 (0.7)	
Total	101 (75.9)	26 (19.5)	6 (5.6)	
Occupation				
Formal	11 (8.3)	4 (3)	1 (0.8)	
Informal	70 (52.6)	15 (11.3)	5 (3.8)	0.225
Student	15 (11.3)	2 (1.5)	-	
Unemployed	5 (3.8)	5 (3.8)	-	
Totals	101 (76)	26 (19.6)	6 (4.6)	

*Results significant at the $p \leq 0.05$ level.

There was a statistically significant association between pre abortion contraception use and women's age and education levels. Records of women who accessed induced abortion care, showed that most were not using any means of contraception. Among the few women found to be using a method of contraception, a majority were within the ages of 20-29 years and the oral contraceptive pill was their preferred contraceptive option. Although higher failure rates could be experienced from inconsistent use of the oral contraceptive pill, women's reliance on the contraceptive pill may have been due to the ease with which it can be accessed and administered in Ghana. Women under 20 years were identified as less likely to have used any method of contraception before care. This may be because of their limited knowledge of and access to contraception. It could be also due to the stigma and societal prohibitions around sex at that age, as identified in other studies (Sidze et al., 2014; Warenius et al., 2006). The reliance on short-term methods of contraception across all age groups was also evident.

More women with primary or junior high school (JHS) education compared to other levels of education, used contraception before seeking care. This was not surprising as they formed a majority of the women sampled for the study. Women's education and their pre-abortion contraception use was found to be significantly associated. Contraceptive use was more frequent among women with no children, than those who already had children; this was however not statistically significant ($p=0.903$). A non-significant association was also found between women's marital status, occupation, and their contraception use. The records showed that most women were employed in the informal sector. They therefore formed the greatest proportion of women who had both used and not used a method of contraception before receiving abortion care. The smallest group of contraception users

were students (1.5%). The small number of students using contraception may be due to the fact that they have no money to purchase contraception, since they do not earn an income. Earning an income has been identified as a predictor of contraception use in other studies (Nketiah-Amponsah, Arthur, & Abuosi, 2012; Vukovic & Bjegovic, 2007).

7.5 Post-abortion contraception accepted

The provision of post-abortion contraception, as already indicated, is an important part of post abortion care. The WHO recommends voluntary contraception initiation after care, as women have been found to be more willing to adopt a method of contraception immediately following an abortion, than when it is delayed (World Health Organisation, 2014, 2015). Informed by this recommendation, the health records of women were examined to determine the methods of contraception they accepted before being discharged from the hospital (Table 12).

Table 12: Post abortion contraception accepted by women's socio-demographic characteristics (n=133)

Characteristic	Post abortion contraception					Fisher's exact (p value)
Age	**Refused n (%)**	**IUD n (%)**	**Implants n (%)**	**Injectables n (%)**	**Pills n (%)**	
<20	13(9.7)	-	-	3(2.2)	5(3.8)	
20-29	19(14.3)	1(0.7)	3(2.3)	32(24)	23(17.3)	0.000*
30+	3(2.3)	4(3)	6(4.5)	18(13.5)	3(2.3)	
Total	**35 (26.3)**	**5 (3.7)**	**9 (6.8)**	**53 (39.8)**	**31 (23.3)**	
Marital status						
Single	33 (24.8)	1 (0.8)	3 (2.2)	49 (36.8)	30 (22.5)	
Married	1 (0.8)	4 (3)	6 (4.5)	4 (3)	-	0.000*
Divorced/widowed/ separated	1 (0.8)	-	-	-	1 (0.8)	
Total	**35 (26.4)**	**5 (3.8)**	**9 (6.7)**	**53 (39.8)**	**31 (23.3)**	
Education						
No formal education	3 (2.3)	2 (1.5)	1 (0.8)	11 (8.2)	1 (0.8)	
Primary/ JHS	18 (13.5)	1 (0.8)	7 (5.2)	34 (25.5)	22 (16.5)	
Secondary school	12 (9)	1 (0.8)	1 (0.8)	5 (3.8)	5 (3.7)	0.032*
Undergraduate degree	2 (1.5)	1 (0.8)	-	3 (2.3)	3 (2.3)	
Total	**35 (26.3)**	**5 (3.9)**	**9 (6.8)**	**53 (39.8)**	**31 (23.3)**	
No. of children						
0	26 (19.5)	5 (3.8)	5 (3.8)	31 (23.3)	19 (14.2)	
1-2	6 (4.5)	-	2 (1.5)	16 (12)	9 (6.8)	
3+	3 (2.3)	-	2 (1.5)	6 (4.5)	3 (2.3)	0.627
Total	**35 (26.3)**	**5 (3.8)**	**9 (6.8)**	**53 (39.8)**	**31 (23.3)**	

*Results significant at the p≤ 0.05 level.

The health records reveal statistically significant associations between women's characteristics and method of contraception accepted, after abortion care. The lowest acceptance of injectable contraception was observed among women less than 20 years of age. Although women were counselled and given the option of adopting a method, younger women <20 years may not have found the environment and service youth friendly (Wood & Jewkes, 2006), hence the low method acceptance among them. The acceptance of long acting reversible contraceptives (LARCs) like the contraceptive implants was also significant, intrauterine device (IUD) as were injectables by women 30 years and older, which might indicate their greater resolve to prevent future unintended

pregnancies or may reflect the advice of the health care personnel.

7.6 Safe/unsafe abortion and complications reported in medical charts

In this section, I examine the association between women's socio-demographic characteristics and whether they presented for safe abortion care or treatment for unsafe abortion and its associated complications (Table 13).

Table 13: Safe/unsafe abortion and complications by women's socio-demographic characteristics

Safe abortions/unsafe abortions n (%) (n=133)			
Age	Safe (n=14) n (%)	Unsafe (n=119) n (%)	Fisher's exact (p value)
<20	-	21 (15.8)	
20-29	7 (5.2)	71 (53.4)	0.048*
30+	7 (5.2)	27 (20.3)	
Totals	**14 (10.4)**	**119 (89.5)**	
Marital status			
Single	11 (8.3)	105 (78.9)	
Married	3 (2.3)	12 (9)	0.362
Divorced/widowed/separated	-	2 (1.5)	
Totals	**14 (10.6)**	**119 (89.4)**	
Education			
No formal education	-	18 (13.5)	
Primary/ JHS	2 (1.5)	80 (60.2)	
Secondary school	4 (3)	20 (15)	0.000*
Undergraduate degree	8 (6)	1 (0.8)	
Totals	**14 (10.5)**	**119 (89.5)**	

Methods of unsafe abortion (n=133)			
Age	Less safe n=103 Misoprostol/misoprostol+ mifepristone	Least safe n=16 Herbal/home remedy	Fisher's exact (p value)
<20	16 (13.4)	5 (4.2)	
20-29	66 (55.4)	5 (4.2)	0.005*
30+	21 (16.8)	6 (6)	
Totals	**103 (85.6)**	**16 (14.4)**	

Marital status			
Single	92 (77.3)	13 (11)	0.641
Married	9 (7.5)	3 (2.5)	
Divorced/widowed/separated	2 (1.7)	-	
Totals	**103 (86.5)**	**16 (13.5)**	
Education			
No formal education	13 (10.9)	5 (4.2)	
Primary/ JHS	69 (58)	11 (9.2)	
Secondary school	20 (16.9)	-	0.109
Undergraduate degree	1 (0.8)	-	
Totals	**103 (86.6)**	**16 (13.4)**	

	Complications documented (n=119)				
Age	Offensive vaginal discharge (n=2)	Haemorrhage only (n=73)	Haemorrhage plus abdominal pain (n=10)	Haemorrhage plus abdominal pain and/or fever (n=34)	Fisher's exact (p value)
<20	2 (1.7)	7 (5.9)	2 (1.7)	10 (8.4)	
20-29	-	49 (41.2)	6 (5)	16 (13.4)	
30+	-	17 (14.3)	2 (1.7)	8 (6.7)	0.022*
Totals	**2 (1.7)**	**73 (61.4)**	**10 (8.4)**	**34 (28.5)**	
Marital status					
Single	2 (1.7)	66 (55.5)	7 (5.9)	30 (25.2)	
Married	-	6 (5.0)	2 (1.7)	4 (3.4)	0.284
Divorced/widowed/separated	-	1 (0.8)	1 (0.8)	-	
Totals	**2 (1.7)**	**73 (61.3)**	**10 (8.4)**	**34 (28.6)**	
Education					
No formal	-	9(7.6)	2 (1.7)	7 (5.9)	
Primary/ Junior high school	1 (0.8)	51 (42.9)	7 (5.9)	21 (17.6)	0.792
Secondary	1 (0.8)	12 (10.1)	1 (0.8)	6 (5.0)	
Undergraduate degree	-	1 (0.8)	-	-	
Totals	**2 (1.6)**	**73 (61.4)**	**10 (8.4)**	**34 (28.5)**	

Among the women sampled, most sought treatment for unsafe abortion than safe abortion care. Clear associations were observed between the ages of women and whether they presented for a safe, or an unsafe abortion care. In terms of the educational background of women, a

statistically significant association was observed between education and whether women presented for safe or unsafe abortion care (p=0.000). Young women with lower levels of education were found to have mainly presented with unsafe abortion, than to seek safe abortion care.

A statistically significant association was found between the employment background of women and how they ended their pregnancies (p=0.000). Students and the unemployed were also observed to have resorted to unsafe abortions. Their decision to have an unsafe abortion may have been influenced by their inability to afford hospital-based terminations, which are generally more expensive than most unsafe methods (Leone, Coast, Parmar, Vwalika, & planning, 2016) .

The health records also showed that women presenting for treatment after undergoing unsafe abortions mainly used medical abortions. As indicated earlier, the use of medical abortion without the needed instructions on how to safely use it, makes it a less safe method of abortion. Age was significantly associated with the type of complication a woman presented with (p=0.022). Haemorrhage (resulting from retained products of conception) was the most reported complication for women 20-29 years. There was no significant relationship between women's marital status or education level and the type of complication encountered.

7.7 Summary

This chapter presented data from the hospital records of women who sought abortion care from an NGO operated hospital. The majority of women included in the clinical audit presented for treatment after undergoing unsafe, rather than safe abortions and highlights the magnitude of the problem in Ghana. Women who sought care were mainly aged in their twenties, were yet to have children and generally had low levels of education. The health records also showed that most were not using contraception. Among the few women on contraception, the oral contraceptive pill was their most preferred option. After receiving care, the records showed significant increases in the number of women who opted for methods of contraception including LARCs. This observation gives credence to the WHO's recommendation on the benefits of contraceptive counselling and voluntary initiation of contraceptive methods to women before discharge from hospital (World Health Organisation, 2012, 2014). The next chapter, which is the final chapter of this thesis, highlights and contextualises the major findings of this thesis in the light of the existing literature.

Chapter 8: Discussion and conclusion

This thesis examined unsafe abortions from the perspectives of formal abortion providers, informal abortion providers and women. I used interviews to explore the knowledge, attitudes and practices of abortion providers and the experiences and influences on Ghanaian women who sought care in hospitals following unsafe abortions. I also conducted a chart audit of hospital data to determine the characteristics of women who sought abortion care, from an NGO operated health facility in the Ashanti region of Ghana. Eliciting and utilising the views of this diverse range of participants in a single study makes a significant contribution to the Ghanaian induced abortion literature.

In this final chapter, I discuss the implications and relevance of the main research findings in the context of existing literature. These include three key issues which to the best of my knowledge have not been extensively discussed in the Ghanaian induced abortion literature and in relation to the three delays model in the international induced abortion literature as well:

1) issues related to the Ghanaian pharmaceutical industry provision of medical abortion;

2) influences on formal and informal abortion provider motivation, attitudes and behaviours; and

3) the three delays model related to abortion.

The strengths and limitations of the research are also discussed, along with the research recommendations and conclusions.

8.1 Medical abortion and the Ghanaian pharmaceutical industry

Pharmacy provision of medical abortion

Medical abortion using the combined WHO recommended regimen of mifepristone and misoprostol or misoprostol alone, is a safe and highly effective method of abortion up to and even after nine weeks of gestation (Faundes, Fiala, Tang, & Velasco, 2007; Mazza et al., 2020; Von

Hertzen et al., 2003; World Health Organisation, 2019). Due to the importance of mifepristone and misoprostol to the provision of medical abortion, it has been added to the WHO's essential list of medicines (World Health Organisation, 2017c).

The WHO also recommends that health care workers (including auxiliary nurses, auxiliary nurse midwives, nurses, midwives, associate/advanced associate clinicians and non- specialist and specialist doctors) with the necessary training are capable of safely providing medical abortions for pregnancies less than 12 weeks gestation. For higher gestation pregnancies (in places where there is the necessary infrastructure to treat incomplete abortions and complications should they occur), nurses, midwives, associate/advanced associate clinicians can also safely provide the service (World Health Organisation, 2019).

While estimates suggest some 95% of women in high resourced settings use medical abortions under the supervision of nurses and midwives (Kopp Kallner et al., 2015), in this Ghanaian study, most women purchased their medical abortifacients over the counter from unregulated pharmacies and used it without the supervision of qualified health care professionals. They were also either misinformed about how to safely use the medicine or given no information, thereby increasing their risk of complications (Adde, Darteh, & Kumi-Kyereme, 2021; Ganle, Busia, & Baatiema, 2020). Poor abortion care and misinformation by pharmacyworkers is also reported in other low resourced settings outside Ghana (Footman et al., 2018; Lara,Abuabara, Grossman, & Díaz-Olavarrieta, 2006; Reiss et al., 2017; Rogers, Sapkota, Paudel, & Dantas, 2019).

Though the dispensing of medical abortifacients over the counter by pharmacy workers is against the recommended practices set out by WHO (World Health Organisation, 2014), pharmacy workers in this study not only dispensed medical abortifacients, but also went ahead to treat those who presented with complications. Reports of similar harmful practices have been indicated in various African and Latin American countries (Lara et al., 2006; Sneeringer et al., 2012).

Given the significant numbers of women who access abortion services from pharmacies regardless of the regulation governing pharmacy distribution of medication abortifacients, some countries like Kenya have amended their laws to allow pharmacy workers to educate clients on the various methods of abortion. They can also provide referrals to services where they can safely have their pregnancies aborted and further sell medical abortifacients to clients who present with prescriptions (Njunguru, Finnie, Footman, Liambila, & Reiss, 2016). The WHO and countries like

Ghana and other low resourced settings where pharmacies play an important role in health care delivery (Ahmed & Hossain, 2007), should enact similar policy reforms, to regulate the abortion industry, and equip pharmacy workers dispensing medication abortion with the necessary provider training and information so that the lives and health of women who access their services could be safeguarded.

The Ghanaian pharmaceutical industry and medical abortion

The provision of poor-quality abortifacients increases the probability of women to have a failed or incomplete abortion and require subsequent hospital care. Though the WHO estimates the distribution of fake and substandard medicinal products is a global problem, it is significant in Africa (Cartwright & Baric, 2018; World Health Organisation, 2017b). Pharmacy workers in this study sometimes stocked their shops with medical abortifacients from sources whose quality and efficacy could not be ascertained, because the medications had not been tested and approved for use by the Ghanaian authorities.

Pharmacy workers in the study acknowledged the illegal trade in medical abortifacients is a profitable line of business, involving many people other than themselves. They argued that due to the profitability involved in supplying abortifacients, the suppliers adopted various measures not only to protect their line of business, but also their source of revenue, and control over the distribution of abortifacients. A global study on fake and sub-standard medicines by the WHO, identified the sale of fake and sub-standard medicines as the most lucrative global sale in counterfeit goods. This practice was worth a global value of around $200 billion, with Africa accounting for over 42% of sales (World Health Organisation, 2017b).

These pharmacy suppliers were also identified as engaging in illegal and dangerous activities, like the re-branding of abortifacients. This could result in situations where not only sub-standard, but expired (ineffective) abortifacients are sold to women. In a global surveillance project on sub-standard medicines, the WHO recognised the distributors of sub-standard medicines engaging in similar re-branding activities which are inimical not only to the health of the users, but also has the potential to significant harm or even kill women (World Health Organisation, 2017b).

To help curb this menacing practice, apart from legalising and monitoring the sale and

distribution of medical abortifacients, the activities of some companies like **Mpedigree** (M.pedigree.com, 2020) who use mobile phone technology to determine the authenticity of medicines, should be popularised. To check the authenticity of medicine, purchasers have to either scan a barcode on the packaging of the medicine with their phone camera, or scratch and reveal a code on the packing where they can text to a toll free number to determine the authenticity of the medicine (M.pedigree.com, 2020). The company currently partners with various pharmaceutical companies in Africa and Asia to detect counterfeit medicines. Available evidence shows that the use of this technology has led to a 65% reduction of counterfeit products in some major Nigerian companies (M.pedigree.com, 2020). Similar codes can be placed on the packages of medical abortifacients and women educated on its use to enable them to verify the authenticity of abortifacients purchased. Also, regulatory bodies like the Pharmaceutical Council of Ghana should be funded and equipped to provide regular education and monitoring to ensure the provision of quality medical abortifacients, dispensed by a qualified workforce.

8.2 Influences on formal and informal abortion provider motivation, attitudes and behaviours

Formal and informal abortion providers in this study revealed striking differences in the factors which influenced them to become abortion providers and their attitudes towards the clients they served. Among formal abortion providers, training in abortion provision and regular exposure to the consequences of unsafe abortions on the lives and health of women, influenced them to become abortion providers. They rationalised that since induced abortion related deaths are preventable, they could protect the lives and health of women by utilising their skills to treat women who present for safe abortions and complications from unsafe abortions. In the wake of current global abortion provider shortages (Harries & Constant, 2020; Jones & Kooistra, 2011), the willingness of participants to utilise their skills for the benefit of women, indeed shows the need to provide more abortion training opportunities for health care workers, as this can increase the number of safe abortion providers and care to women.

Access to safe abortion hinges on the availability of trained abortion providers (Aksel, Fein, Ketterer, Young, & Backus, 2013). To ensure the supply of future abortion providers, there is a need to increase abortion training opportunities for health care students in training institutions, as

this can motivate and increase their commitment to abortion provision in their future practice. Available evidence from both high and low income countries confirms the positive relationship between attitudes towards abortion and the decision to provide abortions, among medical students exposed to abortion training during their education (Abdi & Gebremariam, 2011; Aksel et al., 2013; Espey, Ogburn, & Dorman, 2004; Steinauer et al., 2008).

The illegal nature of informal abortion provision meant there were no standardised guidelines for these providers on the safe provision of services. This exposed women (who become vulnerable when desperate to have their unintended pregnancies aborted), to the possibility of serious health risk, exploitation and the experience of negative attitudes from these providers. Chemlal and Russo (2019) corroborates the heightened possibility of misinformation and mistreatment of women who access abortions from informal and ill-prepared providers.

Pharmacy workers, in the study for example, displayed misogynistic attitudes, labelling and stigmatisation towards women who sought their services. Their patriarchal attitudes towards women were reflected in their propensity to categorise women and determine the kind of treatment they deserved. They made snap and misinformed judgements about whether clients were experienced in the use of medical abortifacients and therefore did not need any further information on dosages.

Since pharmacy provision of abortion is illegal, most pharmacy workers overlooked the importance of educating women about correct dosages of abortifacients, to help avoid any adverse health effects. Given the fact that most women in this study had low levels of education, such assumptions could place women's lives and health at risk. In some cases, a few pharmacy workers gave clients advice on abortifacient dosages. Their advice was, however, against the manufacturer's instructions and the recommended regimen by the WHO for the effective and safe termination of pregnancies using medical abortion. This is consistent with Billings, Walker, Mainero del Paso, Clark, and Dayananda (2009), who also found that pharmacy workers in Mexico misinform their clients on the correct dosages of medical abortifacients, because they had not been trained.

Evidence suggests that many Ghanaian women and women from various low resourced countries rely on the services of pharmacy workers for terminations (Ahiadeke, 2001; Footman et al., 2018; Ghana Statistical Service et al., 2018; Njunguru et al., 2016; Powell-Jackson, Acharya,

Filippi, & Ronsmans, 2015). To protect the lives of its women, Kenya has enacted policy reforms, regular training and monitoring programs to enable pharmacy workers to safely provide first trimester abortions (Njunguru et al., 2016). This should be replicated in Ghana and other low resourced settings as it will increase access to safe abortion care and prevent women from being exploited financially at a time when they are most vulnerable and desperate for help.

Herb sellers similarly were more concerned about maximising their financial returns than considering the effect of their activities on clients. The illegal nature of their activities led to situations where they had no standardised guidelines but instead used their discretion to arbitrarily increase the cost of abortifacients for women. By increasing their prices, they denied women without enough money the right to abort their pregnancy. Though provision of herbal medicines for termination of pregnancy is deemed unsafe (World Health Organisation, 1993), herb sellers could provide a key opportunity to ensuring that more women undergo abortions safely. Most herb sellers who participated in this study were women, with limited income. These herbal medicine sellers could be given financial incentives based on the number of women they refer for safe services. This could contribute by improving the numbers of women who might reach safe health care services and replace the loss of income to poor and uneducated herb sellers.

8.3 Limitations of abortion records in public health facilities in Ghana

Health record data for this study was gathered in only one private non-governmental operated health facility because data at the public health facility sites where I conducted interviews were very minimal and unsuitable for analysis. The health record data from the NGO facility revealed the poor socio-economic circumstances, low contraceptive use and the use of post abortion, rather than safe abortion care by the majority of women who access hospital-based care. The numbers of women who were offered and accepted a method of contraception after care was also important.

Given the more varied background of women who access care from public health facilities, there isthe need for improved data recording and storage to monitor trends in safe and unsafe abortions and women's morbidity and mortality related to abortion in Ghana. Improved data collection and analysis can assist government policy and programming and inform the development of appropriate interventions to prevent delays women sometimes experience in

their journey to access safe abortion care.

8.4 The Three Delays Model

As discussed earlier (Chapter 3), the three delays model by Thaddeus & Maine (1994) is a theoretical framework for explaining the causes of maternal mortality. The three delays model conceptualises maternal deaths as resulting from three main delays experienced by pregnant women in seeking, reaching and receiving appropriate medical care. These include the time taken on deciding to seek medical care, reaching a health facility where they can access the needed care and the time a woman has to spend at the health facility before being given the needed medical attention.

Although the three delays model was originally conceptualised for the study of maternal mortality (Calvello, Skog, Tenner, & Wallis, 2015), within this study, I have adapted it to explain the decisional processes of women in deciding, reaching and receiving treatment after experiencing an abortion complication.

In this study, contraception use among women sampled during interviews and health record data was low, exposing them to unintended pregnancies. This low rate of contraception use among participants reflects the high rates of unmet need for contraception within the Ghanaian society (Ghana Statistical Service et al., 2015). The available evidence indicates an association between unmet need for modern contraception, unintended pregnancies and induced abortions (Deschner &Cohen, 2003; Guttmacher Institute, 2017a; Singh et al., 2014; Singh, Darroch, et al., 2009). Among women with unintended pregnancies seeking abortion, factors like poor knowledge of pregnancy, underestimation of the seriousness of abortion complications, financial difficulties, provider attitudes, abortion stigma, the influence of religion, the proximity of pharmacies and long hospital waiting times before treatment, all act as barriers and delay women's access to care. I propose to explain these barriers using the three delays model.

First Delay

During the first phase of delay, many women delayed their decision to seek care because they did not realise they were pregnant early enough or were in self-denial. Women's poor education

around reproductive health led to late recognition of pregnancy signs, until their pregnancies were much advanced and terminating it was more expensive and also posed greater health risks. Women may have also delayed due to concerns about being embarrassed for being either too young or too old to become pregnant. Among the women were some who also delayed in their decision to seek care due to concerns about suffering stigma by going for an abortion which was against their religious beliefs. To reduce such occurrences, there is a need for periodic community and school based educational campaigns on sexual and reproductive health, stigma reduction and the importance of effective contraception use for pregnancy prevention.

Further phase one delays were women's reluctance to seek medical care after experiencing abortion complications. The qualitative and quantitative data analysed in this study showed that women perceived signs such as haemorrhaging and fever after an abortion as normal signs which might resolve on their own. Women may have underestimated these symptoms to keep their abortions a secret and reduce the possibility of being stigmatised. Reports of women suffering stigma from both the members of their community and health workers for having abortions have been reported elsewhere (Izugbara et al., 2015; Koster-Oyekan, 1998; Koster, 2003). The study participants may have also delayed seeking care due to financial constraints, as prohibitive costs have been consistently reported in a number of studies (in both high and low income countries), as an important factor in women's decision making on abortion (Atakro et al., 2019; Frederico, Michielsen, Arnaldo, & Decat, 2018; Jones et al., 2010; Mundigo, 2006; Roberts, Gould, Kimport, Weitz, & Foster, 2014).

Second Delay

The second set of delays were experienced by women in reaching health facilities where they could receive the necessary medical care. After deciding to seek care, women opted for services from pharmacies, thereby delaying their access to safe abortion care from hospitals. Women may have preferred these facilities as they were within walking distance, their services were cheaper, their personnel numbers were limited, which they may have perceived as protecting their privacy. They perceived these facilities would prevent stigma and offer them anonymity, as no personal data on the women is collected. Women's concern over the privacy of abortions overrode issues of their own safety and has been identified elsewhere (Izugbara et al., 2015). Participants

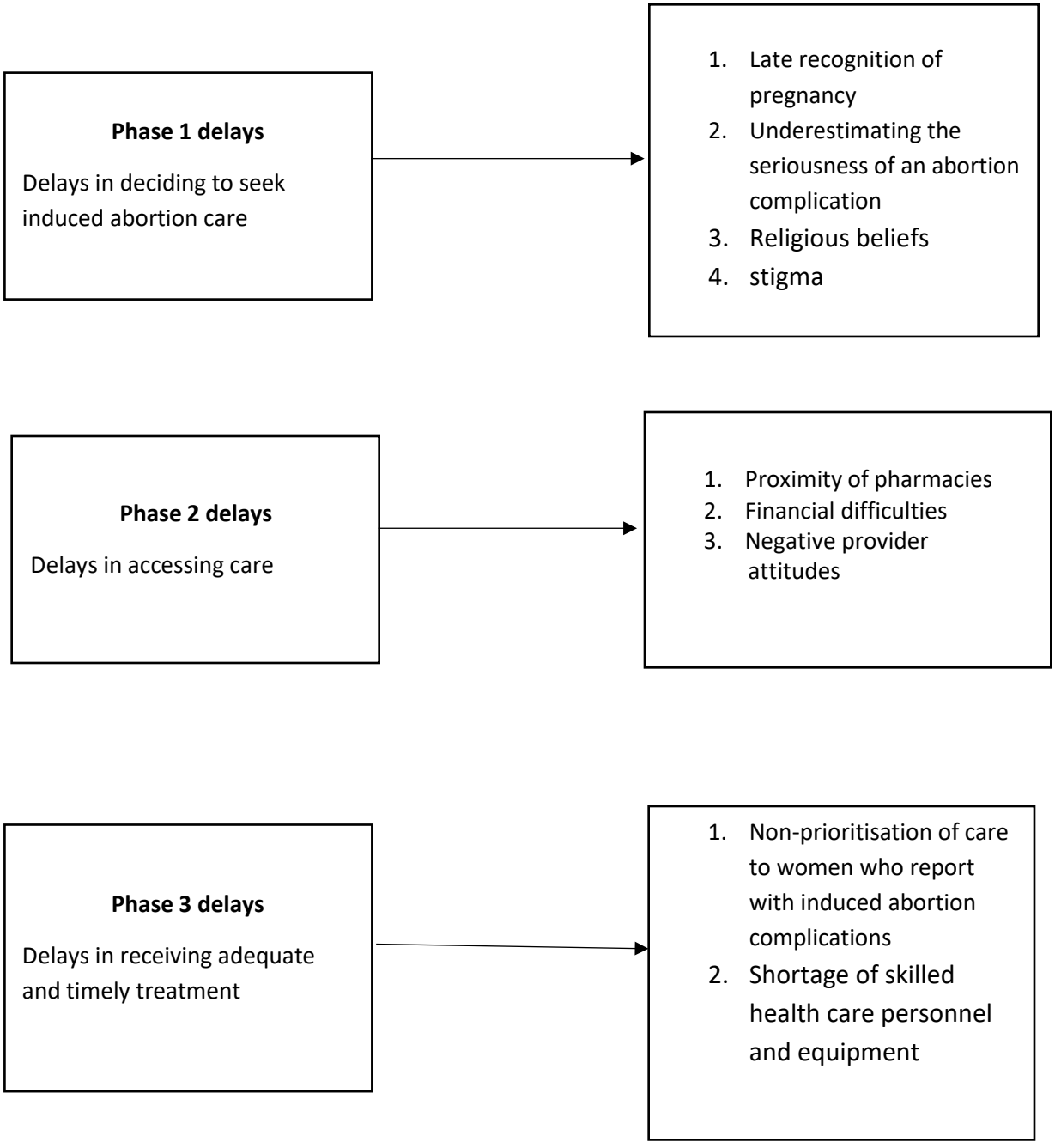
only went to big health facilities with the personnel and equipment to provide the necessary care after their conditions failed to resolve or deteriorated.

Third Delay

The final set of delays were experienced by study participants when they arrived at hospital with post abortion complications. Despite reporting complications (some of which were life threatening), the staff did not accurately triage their case as an emergency requiring prompt attention. Health workers may have delayed providing care for women to punish them for engaging in an act which, in Ghanaian society is not only seen as anti-social, but also anti-female.

Evidence of obstetric violence (Maya et al., 2018; Schwandt et al., 2013; Vacaflor, 2016) and the mistreatment of women seeking treatment for abortion complications has been reported in Ghana and elsewhere (Gerdts et al., 2017; Tagoe-Darko, 2013). Women may have also experienced delays when they arrived at the health facility, due to limited number of skilled and willing health care workers to provide them with the necessary medical care. Shortages of health care workers trained and willing to provide induced abortion care have been reported in both high and low resource settings (Harries et al., 2009; Jones & Kooistra, 2011). A lack of resources like medical equipment and supplies could have also contributed to the experience of delays by women after arriving at the hospital (Moyimane, Matlala, & Kekana, 2017). Figure 9 is an adaptation of the three-delay model to the maternal mortality attributable to unsafe abortion delays.

Figure 9: An adaptation of the three model to unsafe abortion



8.5 Strengths and limitations

Strengths

A major strength of this study has been gathering data from a diverse sample of participants. Data was triangulated from women within the reproductive ages of 18-49, who had sought care for unsafeabortion complications in health facilities, a range of formal abortion providers, informal abortion providers and the medical records of women who sought induced abortion care from an NGO operated health facility. Gathering data from this range of participants in a single study and allowingparticipant voices and perspectives to be heard, provided a breadth of perspectives on the topic andto the best of my knowledge is the first of its kind in Ghanaian and African induced abortion research.Another strength of this study is the proposed use of the three delays model; mainly used in explaining maternal mortality associated with peri-natal care. In this study, I proposed the three delays model to explore the unsafe abortion experiences of women; which to the best of my knowledge is an innovation in induced abortion research within the Ghanaian, African and global context. Sampling abortion providers from hospital and non-hospital settings is another strength of this study. It allowed a nuanced understanding of the activities of the various categories of abortion providers and how these either enabled or hindered access to induced abortion care. This an understudied area in Ghanaian induced abortion studies.

Limitations

This research is not without limitations. First of all, only women who sought care for unsafe abortioncomplications in health facilities were included. Varying the sample to have included women with induced abortion related experiences outside hospital settings may have resulted in further insights.Also, not all types of informal abortion providers (e.g. kerb side unsafe providers) were included because they were considered dangerous to my safety. Another limitation of this study was the useof health record data from just one non-governmental hospital, due to the inadequacy of records from the public health facility study sites. The inclusion of data from the public health facility sites might have been more representative of the induced abortion related experiences of women in thestudy area. Finally, the study was carried out in just one Ghanaian region, it therefore limits the generalisability of the study findings. Finally, I present the study recommendations.

8.6 Recommendations

Based on the study findings I make the following recommendations:

- Public education and discussions about pregnancy and how to prevent it should be organised in schools and at the community level, for all community members especially women and girls.
- Pharmacies are an important source of health care in many Ghanaian communities. Most pharmacies are within walking distances from the homes of women and are often their most accessible source of health care. There is a need to legalise the provision of medical abortion by pharmacy workers and provide them with the needed training not only to provide medical abortion safely but also to educate and treat women who access their services respectfully.
- Regulatory bodies like the Food and Drugs Authority of Ghana and the Ghana Pharmaceutical Council must be funded and equipped to ensure that no sub-standard medical abortifacient is sold in Ghanaian pharmacies. Additionally, they must undertake regular monitoring to ensure that only properly trained people dispense these abortifacients.
- Public awareness must be created about the availability of simple technologies like **mpedigree** phone application for checking the quality of medicines including medical abortifacients.
- **Mpedigree** must be resourced to create more public awareness about their existence and activities in Ghana and other parts of Africa.
- Gender sensitive training must be provided to male pharmacy workers to increase their empathetic understanding and reduce instances of stigmatising attitudes towards women.
- Pharmacy workers can also be trained to liaise with hospitals and serve as referral points to women who present at higher gestation.
- More health care workers must be trained in safe abortion provision and values clarification workshops to ensure better care and improved attitudes towards women they serve.
- There is the need to include education on safe abortion provision in the curriculum of students in health care training institutions to improve the numbers of abortion

providers as this has been identified to have a positive impact on the future decisions of students to include abortion provision in their practice.

- Herbal medicine sellers should be given incentives based on the number of women they refer for safe services. They could also be educated on the dangers of providing unsafe abortions, judgmental and abusive attitudes to women with unwanted pregnancies and made aware of places where women could access safe services.
- There is a need for better recording, collection, storage and preservation of the health records of women who access induced abortion care, especially in the publicly run health facilities to better inform the development of policy, programs and intervention
- Community educational campaigns and sensitisation programs targeted at changing misconceptions and highlighting the benefits of the most effective forms of contraception, especially Long Acting Reversible Contraception (LARCs) in preventing unplanned pregnancies should be undertaken, as most unplanned pregnancies are believed to end in induced abortions (Ganatra et al., 2017).
- Post abortion contraception and counselling also needs to be strengthened and better integrated in induced abortion care to prevent future unplanned pregnancies.

8.7 Conclusion

Unsafe abortion is a public health issue in Ghana and elsewhere, directly impacting women and contributing to significant maternal morbidity and mortality, it has far reaching consequences on their families, communities and societies. A woman's decision to have an abortion and the range of providers she accesses are therefore, influenced by the many factors across the socio-ecological environment in which she finds herself. Although the three delays model can be used to explain women's abortion experiences, in order to find a solution to the problem of unsafe abortions there is a need for a multisectoral approach to prevention. This approach ranges from educating women, to equipping them with knowledge on their reproductive health and contraception use to prevent unwanted pregnancies. In addition to this, empowering women economically as a means of balancing the power relations in their sexual relationships to enable them access safe abortions on their own should the need be is

essential. Finally, there is a need for regular community education on induced abortion to reduce the stigma around it and legal reforms to regulate abortion provision.

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Appendices

Appendix A: Manuscript accepted for publication in BMJ Sexual and Reproductive Health on the Three Delays model

Title page

Title of article - **The Three Delays Model applied to prevention of Unsafe Abortion in Ghana: a qualitative study**.

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Abstract

Background: Unsafe abortion is an important public health problem in Ghana, making significant contributions to the morbidity and mortality of reproductive aged women. Although mostly used in explaining mortality associated with perinatal care, recent calls for research on induced abortion in Africa suggest the three delays model could be used to enhance understanding of women's experiences and access to induced abortion care.

Methods: We conducted 47 face to face interviews with women who experienced unsafe abortions, with formal abortion providers (abortion providers in hospitals) and with informal and non-legal abortion providers (pharmacy workers and herb sellers). Study participants were recruited from selected hospitals, community pharmacies and markets within the Ashanti region of Ghana. We drew on phenomenology to analyse the data.

Findings: The first delay (delay in seeking care) occurred because of women's poor knowledge of pregnancy, the influence of religion and as a result of women underestimating the seriousness of abortion complications. Factors including cost, provider attitudes, stigma, and the proximity of pharmacies to women's homes delayed their access to safe abortion and resulted in their experience of the second delay. The third delay was a result of hospitals' non-prioritisation of abortion complications and a shortage of equipment resulting in long hospital waiting times before treatment.

Conclusion: This study has shown the value of the three delays model in illustrating women's experiences of unsafe abortions and ways of preventing the first, second and third delays in their access to care.

KEY MESSAGES

- Despite legally permissible abortions, Ghanaian women mainly obtain abortions outside the formal health delivery system using unsafe methods.
- Various individual, community and societal factors act as barriers, delaying Ghanaian women's access to safe abortion care within the formal health delivery system
- The three delays model can be used as a framework in understanding these delays experienced by women in accessing abortion care

Main text

Introduction

In Africa, 8.3 million abortions occur annually with African women experiencing the highest risk of induced abortion related mortality than women anywhere (1-3). On current estimates, some 16,000 African women die a year from unsafe abortion related complications and an estimated 1.6 million experience morbidities as a consequence of unsafe abortions (4). In Ghana, legal abortions are allowed in cases of rape, incest, foetal anomalies and to protect the physical or mental health of the pregnant woman, this notwithstanding, unsafe abortion is a significant public health problem (5-7).

Formal Ghanaian health care is mainly provided by the Ghana Health Service and health care delivery is structured into primary, secondary, and tertiary care (8). However, access to safe abortion care in these facilities is not readily available (9). In a national study on maternal health including induced abortions, the majority of women were reported to have ended their pregnancies outside the formal health system with medical abortifacients containing either misoprostol alone or a combination of misoprostol and mifepristone (7).

While Ghanaian research has presented women's abortion experiences (7, 11), there is limited evidence from Ghanaian abortion providers, including pharmacy workers and herb sellers. Given the role providers play (formal and informal) in abortion safety, and women's experience of delays, an exploration of their perspectives is important.

The three delays model has been used to explain maternal mortality related to perinatal care, but not with induced abortions (12). The model proposes that delays experienced in deciding to seek health care, reaching a health care facility and receiving appropriate care are important contributory factors to maternal mortality (12). Recent calls for a research agenda on induced abortion suggested that using the three delays model and exploring specific populations, such as health care providers, could enhance our understanding of women's unsafe abortions (13).

This paper, from a wider study exploring providers' and women's unsafe abortion experiences, aims to provide evidence for the utility of the three delays model as a framework for understanding women's experiences of unsafe abortion in Ghana.

Methods

We conducted the study in the Ashanti region of Ghana, the most populous region with significant prevalence of induced abortions (7, 14). Women and formal abortion providers were recruited from

three hospitals. Informal abortion providers (pharmacy workers and herb sellers) were recruited from eight pharmacies and three markets within the wider community between June 2017-March 2018.

Women were eligible if aged between 18-49 years and reporting to participating hospitals after complications from unsafe abortions. The single inclusion criterion for abortion providers was abortion provision.

We utilised purposive sampling in recruiting women and formal abortion providers from the hospitals. In recruiting the women, advertising materials were placed on notice boards and at vantage locations within hospitals. Study materials were also left with health care workers, who advised women meeting the inclusion criteria about the study. Women who expressed interest in participating were approached by the lead researcher (MO). Only women treated and ready for discharge were enrolled in the study to avoid situations where women felt their participation could influence care. The lead researcher explained the purpose of the study and sought both verbal and written consent. Participants were made aware of the voluntary nature of participation and all underwent a confidential interview in Twi (the local language) using an interview guide (supplementary file 1).

Formal abortion providers were recruited through one-on-one promotion of the study. Following explanation of the voluntary nature of participation and consent, confidential interviews with providers were conducted after their hospital shift (supplementary file 2).

With informal abortion providers, due to the sensitivities surrounding illegal activities, initial attempts at recruitment failed. MO therefore recruited a respected community leader who facilitated the process to reach them (15). After initial informal abortion provider interviews we used snowballing to recruit the rest of the sample (supplementary file 3 and 4).

We used thematic semi-structured interview guides. Interviews were a one-off encounter and interviewees were assured that data were stored confidentially and in an anonymous form. Participants were further assured that their location would not be identified. Each interview lasted between 30-75 minutes and were conducted and audio-recorded by the lead researcher in Twi, the local language. Both verbal and written informed consent were obtained.

This qualitative study drew on phenomenology, which studies patterns of peoples' lived experience and how they have explained it, to enable detailed analysis of participants' abortion experiences (16). Data analysis commenced with cleaning and transcribing of interviews into English. Coding was an inductive process during which the research team read and re-read the interview transcripts to

generate and finalise codes for onward categorisation (16-18). To validate and enhance a more comprehensive understanding of unsafe abortion, we triangulated the data of women with providers (formal and informal) (18). During data analysis, the research team identified women experiencing delays in their decision to seek, reach and receive care after unsafe abortions, for which we found the three delays model a good fit to explain what was occurring. All names used in the paper are pseudonyms

Ethical clearance for the study was obtained from the La Trobe University Human Ethics committee in Australia (HEC17-009) and the School of Medical Sciences/Komfo Anokye Teaching Hospital Committee on Human Research Publication and Ethics in Ghana (CHRPE/AP/547/17).

Patient and Public Involvement

No patients/ public were involved in this study.

Results

Participant characteristics

We interviewed 47 participants; 24 women mostly from low-income households and employed in their own small businesses, 10 formal abortion providers who were mainly midwives and 13 informal abortion providers, made up of eight pharmacy workers and 5 herb sellers (Tables 1 and 2).

Table 1: Characteristics of women seeking care following informal abortions (n=24)

Characteristic	*Number (n,%)*	
Age	**n**	**%**
<20	5	(21)
20-29	11	(46)
30-39	5	(21)
≥40	3	(12)
Marital status		
Single	15	(63)
Married	8	(33)
Separated/divorced/widowed	1	(4)
Educational level		
No formal education	3	(12)
Primary/Junior high school	9	(38)
Senior high	9	(38)
University	3	(12)
Employment status		
Formal sector	3	(12.5)
Informal sector	16	(67)
Student	2	(8)
Unemployed	3	(12.5)
Number of children		
0	14	(58)
1-3	6	(25)
≥4	4	(17)
Method of inducing abortion		
Herbal abortifacient	6	(25)
Medical abortifacient	18	(75)

Table 2: Characteristics of abortion providers (n=23)

Interview Participants	No.	Age	Sex	
			Males	Females
Formal abortion providers (n=10)				
Midwives	5	30-50		5
General practitioners	2	39-42	2	
Gynaecologist	1	55	1	
Physician assistant	1	31		1
Public health nurse	1	59		1
Informal abortion providers (n=13)				
Pharmacy workers (n=8)				
Pharmacists	2	30-40	2	
Dispensing technicians	3	26-30	2	1
Pharmacy assistants	3	20-24	2	1
Herb sellers (n=5)				
Herb sellers	5	20-70	1	4

We present the results of the study highlighting the first, second and third delays women experienced in their unsafe abortion journey. All delays represented in figure 1 emerged from the experiences of women in this study.

First delay

In this study, women experienced the first delay when they delayed in their decision to seek abortion or post abortion care due to late recognition of pregnancy, underestimating the seriousness of an abortion complication and concerns about suffering stigma from breaching religious norms. Women's poor knowledge about reproductive health led to delayed testing and late recognition of pregnancy signs, resulting in abortions at higher gestations, carrying greater risks to the lives and health of women. Patricia delayed her decision to seek abortion care because she did not recognise she was pregnant until it was well advanced:

> …I used to get tired easily, but I thought it was because of the kind of work I did … I also noticed that the number of days I menstruated had reduced from seven days to three days, but I did not think it was pregnancy… *(Patricia, 44 years).*

Similarly, other women spoke of delays in their decision to seek care due to poor education around pregnancy:

> …the pregnancy resulted from my first sexual intercourse; I did not know I could get pregnant the first time (*Leticia, 19-years).*

After undergoing an unsafe abortion using herbal abortifacient, Juliana thought the bleeding she was experiencing would resolve on its own and hence delayed care till her situation worsened:

> … abortion occurred after using herbs. … the blood was still coming. I thought it was normal and would resolve on its own. … fainted and was brought here. … they told me I was anaemic and there were still some products of conception. …. they evacuated it at the theater (*Juliana, 24 years*).

The strong influence of religion also caused delays in women's decision to access care:

> …Most of our women know that they *can* come to the hospital for safe abortion, but they *would not*, with our Christian life. We think we are so Christian that the thing is wrong *('Aunty' Vida, Midwife).*

Second delay

The second delay in this study is defined by difficulties in reaching care. Financial difficulties, stigma, prejudice, power imbalance, local pharmacy access and patriarchal attitudes contributed to women's

experience of the second delay. Women's financial resources played an important role in their experience of this delay: the inability to pay for safe abortion was a barrier to care, resulting in abortions at higher gestations and reliance on inexpensive unsafe methods:

> … he gave me fifty cedis … it was not enough … I bought an abortifacient from the market *(Beatrice, 28 years).*

> …the herbs are not expensive but very efficacious… many buy ('*Sister' Gifty, Herb seller*).

> …she will sit at home and save till she gets the two hundred cedis or use an unsafe means which is cheaper ('*Aunty' Mary, Midwife).*

Because pharmacy provision is illegal and unregulated, pharmacy workers could adjust the costs as they please:

> …usually, I look at the person coming to buy if they appear rich… I increase the price a bit *(Bra George, Pharmacy shop assistant).*

Women denied access to care due to poverty may not only experience delays but could also die:

> It was after she died that the sonographer working with us mentioned that the girl came to enquire from him the cost of an abortion .... she had only thirty cedis ….he told her to go and raise the additional money and then come. Since the girl could not raise the extra money, she opted for the cheaper option which led to her death ('*Aunty' Charlotte, Midwife).*

Women also delayed reaching the formal health system due to the ease of local pharmacy access:

> …they go to the pharmacy to buy medicines rather than … the hospital. …pharmacy it is fast you buy, and you are off unlike the hospital where you have to be registered and wait your turn to see the doctor *(Dr John, General practitioner).*

> …I told the person … at the pharmacy I wanted medabon and he brought it. I paid and left; he did not ask any questions *(Sarah, 21 years*).

Though without training, some pharmacy workers took it upon themselves to treat women with complications an act which delayed women from accessing hospital care:

> … I tell them that if the bleeding is usually long … they should come back so I give them something to stop the flow *('Bra' Josh, Pharmacy shop assistant).*

Third delay

The third delay occurred when women arrived at the hospital with post abortion complications. Women sometimes reported waiting for very long periods because of negative provider attitudes, stigma or

abortion being treated as the lowest priority in obstetric care. This sometimes led to situations where women with life threatening complications were not treated as an emergency and were made to undergo cumbersome administrative processes:

> … I was bleeding all this while… but was not attended to until my husband did the paperwork… when he finished a nurse sent me to the ward and administered IV fluids. I was very weak I bleed so much. … you see how white my palms have become it is now even better *(Patricia, 44 years)*

There are also instances where women experienced delays after reporting at hospitals for treatment due to limited supply of equipment:

> … the doctor wanted me admitted at the ward but there were no beds… *(Matilda, 31 years)*.

Discussion

As far as we know, this is the first study to use the three delays model in relation to induced abortion care (12). The model proposes that abortion related maternal morbidity and mortality can be classified in terms of delays in seeking, reaching and receiving appropriate treatment at health facilities (12). Our study, conducted in the Ashanti region of Ghana, illustrated that interwoven factors within women's individual level of education along with their communities and wider structural environment contributed to the first, second and third delays. As this research involved only women who sought hospital care after experiencing abortion complications, it may not be representative of all women seeking abortion. Community based studies could further enhance an understanding of the delays experienced by women and explore differences in abortion provision by herb sellers and pharmacy workers

Many women who participated in this study did not recognise the signs of pregnancy until their pregnancies were more advanced at which point terminating it not only carried greater health risks, but was also more expensive. Though available evidence suggests adolescents are more likely to delay abortions due to late recognition of pregnancy (19) in this study, women who had experienced a number of pregnancies and births also delayed accessing care due to late recognition of pregnancy.

Despite pharmacy provision of medical abortion being illegal in Ghana, a significant number of women in the study used it. Like other low resourced settings, women who accessed pharmacy abortions were either given no or limited information on the safe use of the abortifacients (20, 21). Though available evidence highlights the contribution of pharmacy provision of medical abortion to maternal mortality reduction (22, 23), inadequate information on the safe use of these abortifacients could result in incorrect dosages and

unsafe abortions (24). Additionally, pharmacy workers in the study described providing on and off-label treatment to women with complications. This is not only inimical to women's lives as pharmacy workers are not trained in this management, but could delay sick women from accessing the appropriate care promptly. This points to the need for legalisation around pharmacy supply, in this way pharmacy workers can be given the necessary training to safeguard the lives of women and be monitored for safe and effective practice.

Despite prompt treatment being a major determinant of the health outcomes after unsafe abortion (25), medical care for women with abortion complications in hospitals was not deemed urgent. Their delayed care may reflect health care provider and wider societal attitudes towards women who abort their pregnancies. Evidence of obstetric violence (26) and the mistreatment of women seeking treatment for abortion complications has been reported in Ghana and elsewhere (25, 27). Delayed access to treatment may have also been influenced by limited health care equipment and personnel (28).

Conclusion and recommendations

This study has explored the applicability of the three delays model in studies on unsafe induced abortions and enhanced understanding of ways in which women's abortion experiences impacts their access to care. This study was conducted in Ghana and may therefore not reflect the pattern of delays experienced by women in other settings. Negotiating access to discussions on abortions among women and providers within the Ghanaian context where abortion is stigmatised is a major strength of this study. To help prevent unsafe abortion, there is a need for more sexual and reproductive health school-based education along with public health campaigns to equip women to make informed decisions. Campaigns targeted at reducing abortion related stigma are also important. Pharmacy provision of medical abortions should be legalised, and their work monitored. In addition, there is a need for regular training of pharmacy workers on safe dispensing of medical abortifacients, as well as signs of abortion complications to safeguard the lives and health of women they serve. The three delays model is an important framework that can be used to identify where delays occur for women seeking induced abortion care.

Contributorship: MO designed and collected data for the study. Data were analysed by MO with input from all authors into interpretation of the results. MO prepared the first draft of the manuscript. All authors contributed to revising the manuscript and approved the final version.

Funding: Not Applicable**.**

Competing Interest: None

Data sharing/availability: No data are available. Participants were assured that any and all information would remain confidential.

Ethics Approval: This study was approved by the La Trobe University Human Ethics Committee (HEC17-009) in Australia and Komfo Anokye Teaching and the School of Medical Sciences, Committee on Human Ethics Research and Publication (CHRPE/AP/547/17) in Ghana.

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Figure legend

Figure 1: The three delays model applied to unsafe abortion prevention

Appendix B: Notice inviting participants

COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

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La Trobe University
Victoria 3086 Australia
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REGIONAL CAMPUSES
Bendigo
Albury-Wodonga
Mildura
Shepparton

PROJECT TITLE: A mixed methods study of post abortion women and service providers in the Ashanti region of Ghana

Unsafe abortion is the second largest killer of Ghanaian women within the childbearing ages. You are invited to be part of this important project that is recruiting women who have suffered ill health from abortion and persons who help women needing to end their pregnancies.

Do not stand on the side lines

Be a change agent

Let your voice be heard in helping prevent abortion related deaths and ill health among our women

Anonymity, privacy and confidentiality is guaranteed

Contact: Mercy Otsin on +

Appendix C: Individual in-depth interview guide for Women

Topic: A Mixed Methods Study of Post Abortion Women and Service Providers in the Ashanti Region of Ghana

Introduction:

Issues about abortion is sensitive and some of the questions I will be asking may make you feel uncomfortable, but as you have read/have had explained to you from the participant information statement and the consent forms your responses will be kept confidential, anonymous and you have the right to withdraw from the study at any time. If you are uncomfortable with a question just let me know and I will move to the next one.

We can use local language if they are more comfortable with it.

I want to thank you for you agreeing to participate in the study

I will start by asking a few general questions about you

Background Information

1. Please how old are you?
2. Can you read and write?
3. What is the highest level of school you have attended?
4. To which religious group do you belong?
5. Are you currently married?
6. Please what you do for a living?
7. What about your partner, what work does he do?
8. Where do you live?
9. How far is it from this health facility?

Reproduction

Now I will want us to talk a bit about the number of pregnancies and births that you have experienced so far

10. Please how many times have you been pregnant in your life?
11. Sometimes women become pregnant a number of times but not all will result in live births, please tell me the number of children you have?
12. Let us come back to the just ended pregnancy, at the time you became pregnant did you want to become pregnant then?

Probe

- Whether participant wanted to wait until later or
- Did not want to have any more children?

13. What was the reaction of your partner to the pregnancy?

    Probe

    - If partner unaware of pregnancy?

Family planning and contraceptive use

Were you using contraception when any of these pregnancies and births occurred?

Probe

- If no, reason for non-use

14. What about the current pregnancy which ended, were you using contraception?

Induced abortions

15. Apart from the just ended pregnancy, have you ever been in a situation where you had to intervene in ending a pregnancy?
16. Now let us come back to the just ended pregnancy, please remember that this interview is confidential and everything you say will not be divulged to anyone unrelated to the research team. Women who happen to be pregnant when they do not want to sometimes take several actions in trying to end it, what are some of the things you did in trying to end this pregnancy before finally reporting at this health facility?

    Probe:

    - If self-induced ask participant source of knowledge about ways of inducing abortion.
    - If participant sort provider, ask:
        - Type of provider?
        - Method provided?
        - Instruments used?
        - Facility where the procedure took place?
        - Reason for choice of provider?
        - How provider was identified?
        - Cost of service?
        - Distance between provider and residence?
        - How the provider related to her?
        - Satisfaction with the services?

- ♦ Whether they will opt for services again or recommend to a friend if need be?

- Ask for a comparison between the earlier provider and current provider in relation to the initial probes

17. What were some of the health challenges you encountered in your initial attempts at ending the pregnancy before finally reporting at this health facility?

    Probe:

    - What attempts were made at treating the complications before report at health facility?

    I will want us now to focus briefly on your partner, what were his views about ending the pregnancy?

    Probe

    - If partner unaware of pregnancy and abortion?

18. Going back to when you were pregnant, what was the main reason for not wanting to keep it?
19. With whom did you decide on ending the pregnancy?

    Probe

    - Reasons for choice of person?

20. Please tell me your views about abortion?
21. What about your community, how do they see abortion?

    Probe:

    - Ways in which community perceptions affected abortion decisions?

22. I want us to now come back to the health facility, how far is this facility from where you live?
23. What made you decide to come here to seek for treatment after experiencing the complication?
24. After the treatment were you given advice about ways of preventing future pregnancies?

    Probe

    - Whether participant accepted a method and the type of method?
    - If did not find out why?

25. Finally, please tell me what you know about the law concerning abortion in Ghana

Closure

We have come to the end of the interview thank you very much for your time. Is there anything else you would like to tell me? Anything you would have liked me to ask but I didn't or anything you need further clarification on?

I wish to thank you once again

Appendix D: Individual in-depth interview guide for formal abortion providers

Topic: A Mixed Methods Study of Post Abortion Women and Service Providers in the Ashanti region of Ghana

Introduction:
I am Mercy Otsin, a PhD student at Latrobe University. I am undertaking a Doctoral study at the Judith Lumley Centre for Mother, Infant and Family Health Research, in the school of Nursing and Midwifery. This study is about women who have experienced abortion related complications as well as persons involved in the provision of services to them. As a clinician your views are extremely important in helping shape the provision of safe abortion services for women. I really do appreciate you taking time off your busy schedule to grant me this interview. I will start by first asking some general questions about you

Background information/warming up

1. If I say that tell me something about how a typical day in your working life is what will you say?
2. Please how old are you?
3. Are you married?
4. Please what is your area of specialisation?
5. How long have you been practising in that field?

Main issues

6. What training have you received in the provision of safe abortions?
7. Please can you tell how long you have been involved in the provision of services?
8. Please tell what made you decide to provide terminations?

   Probe

   - The most important reason?
9. Now I will want to pick your thoughts about the different methods?

   Probe:

   - Method often provided?
   - Reasons for its frequent use?
   - The least favourite method?
   - Why it is least preferred?
   - Instruments used in provision of services?
   - How the instruments are procured?

10. Do you always provide the terminations in this facility or there are instances where you arrange with patients to provide the terminations elsewhere?
11. There are various reasons women give for seeking terminations, please I will like to know some of the factors that might influence you in either providing or not providing services?
12. What are some of the characteristics of the women who seek for services?
13. Do you think health facility based terminations is the first option for the clients seeking services or it is often the last resort?
14. If not what do you think could be the cause?
15. On the average how many clients do you see in a week?
16. What do you know about the laws governing abortions in Ghana?
17. How do you see the legislation?
18. In your view do you think it provides sufficient grounds for women to seek for safe abortion services?
19. Now let us look at the providers, in your view does the law allow them to do operate without fear of legal reprisals?
20. As a practitioner who provides safe services for women, do you think the law in anyway influences decisions women take about where to seek for services?
21. As you know unsafe abortion contributes significantly to the maternal mortality rate, do women in need of services know where to get it safely done but still seek for services from the quacks, I would like to pick your thoughts on it?
22. What is the cost of services?
23. Do you counsel the women before the procedure about what to expect?

    Probe:

    - Whether provider explains the various methods to them and
    - allows them to choose their method of choice
24. What has been some of your experiences with the attitude of colleagues who know you provide services?
25. There are some instances where some of the health facilities will not be supportive of personnel providing services, what has been the attitude of the administration here?
26. What are some other challenges faced in your work?
27. Please share with me your thoughts about the current way services are provided?
28. What do you think can be done to make it better?

29. Please share with me your general feelings about providing services?
30. Finally, please tell me your views about women who seek for abortions?

Closure

We have come to the end of the interview I want to thank you very much for your time. Is there anything else you would like to tell me? Anything you would have liked me to ask but I didn't or anything you need further clarification on

Thank you once again.

Appendix E: Individual in-depth interview guide for pharmacy workers involved in abortion provision

Topic: A Mixed Methods Study of Post Abortion Women and Service Providers in the Ashanti region of Ghana

Introduction

I am Mercy Otsin, a PhD student at Latrobe University. I am undertaking a Doctoral study at the Judith Lumley Centre for Mother, Infant and Family Health Research, in the school of Nursing and Midwifery. This study is about women who have experienced induced abortion related complications as well as persons involved in the provision of services. As a pharmacist/chemical seller who helps women needing abortions your views are extremely important in helping shape the provision of safe abortion services for women. I really do appreciate you taking time off your busy schedule to grant me this interview. I will want us to get to know each other a little bit before delving into the main issues.

Background information/warming up

1. Please how old you are?
2. Are you married?
3. Please what is the highest level of education you have attained?
4. Please tell me the number of years you have been practicing as a pharmacist/ Chemical seller?

Main issues

5. Please do women in the community who are pregnant but do not want to keep it often come here to seek for help in ending it?
6. In what ways do you assist them?
7. Please, what types of abortifacients do you have in stock?

   Probe:

   - The most popular?
   - Why do you think those brands are preferred over the others?
8. Please tell me where you get your supplies from?
9. On the average, how much do they cost?
10. On the average how many abortifacients do you sell in a week?
11. Please how long have you been involved in selling abortifacients?
12. Do you just sell the abortifacients or you give them advice on the dosage as well?

Probe:

- Advice about how the abortifacient works
- Advice on what to do in the event of a complication
- Whether they dispense the medication on site or the women buy and administer it at home

13. There are various reasons women give for seeking terminations, please I will like to know some of the factors that might influence you in either providing or not providing services?
14. What are some of the characteristics of the women who seek for services?
15. Do you think this is the first point of call for women desiring to end their pregnancies?

    Probe:

    - If yes, why do you think so
    - If no, why
16. Do you interact with them to ascertain how they found out about your services?
17. Please tell me what made you go into the selling of abortifacients?

    Probe:

    - The most important reason
18. Have you received any training in medical abortion?

    Probe:

    - If yes, ask source
    - If no, ask source of knowledge in the current work he/she is involved in
19. What do you know about the laws governing abortions in Ghana?

    Probe:

    - How do you see the legislation
    - Does your knowledge about the law in anyway influence the kind of services you provide
    - Do you think it provides sufficient grounds for women to seek for safe abortion services
    - providers to do their work without fear of legal reprisals
20. Do you give advice about ways of preventing future pregnancies?
21. Please share with me your general feelings about selling abortifacients?

22. Please share with me your views about abortion?
23. What do you think about women who seek terminations?
24. What are some of the challenges you face in your work?
25. How do you think they can be solved?

Closure

We have come to the end of the interview I want to thank you very much for your time. Is there anything else you would like to tell me? Anything you would have liked me to ask but I didn't or anything you need further clarification on

Thank you once again

Appendix F: Individual in-depth interview guide for herb sellers

Topic: A mixed methods study of post abortion women and service providers in the Ashanti region of Ghana

Introduction

I am Mercy Otsin, a PhD student at Latrobe University. I am undertaking a Doctoral study at the Judith Lumley Centre for Mother, Infant and Family Health Research, in the school of Nursing and Midwifery. This study is about women who have experienced induced abortion related complications as well as persons involved in the provision of services. As a traditional medicine practitioner who helps women needing services your views are extremely important in helping shape the provision of safe abortion services for women. I really do appreciate you taking time off your busy schedule to grant me this interview. I will start by first asking some general questions about you before we delve into the substantive issues

Background information/warming up

1. Can you please tell your age?
2. Please are you married?
3. Please what is the highest level of education you have attained?
4. Please tell me the number of years you have been practicing as a traditional medicine practitioner?
5. Please tell me what you do in a typical working day?

Main issues

6. Women who are pregnant but do not want to keep it go to various places to seek help in ending it, in your view do they often call on you first for help before going anywhere else?

   Probe:

   - If yes, why do you think so
   - If no, why
   - Do you interact with them to ascertain how they find out about your services?

7. Please tell me the types of methods you provide?

   Probe:

   - Types of herbs used?
   - Source of supply of the herbs?
   - Mode of administration?
   - How it works?

8. Please share with me how efficacious the different methods are?
9. Can you please tell what made you decide to provide terminations?

   Probe:

   - The most important reason?
   - How long they have been providing terminations?
   - Where they got the knowledge?
   - Where were they trained?

10. There are various reasons women often give for seeking terminations, please I will like to know some of the reasons that might influence you in either providing or not providing services for them?
11. What are some of the characteristics of the women who seek for services?
12. Do you always provide the services in this facility or there are instances where you arrange with patients and provide services elsewhere?
13. Apart from the herbs do you use any instrument in providing services?
14. Please tell me what you do if something goes wrong during service provision?
15. Please how much do you charge for your services?
16. Do you give advice about ways of preventing future pregnancies?
17. What do you know about the laws governing abortions in Ghana?

    Probe:

    - How do you see the legislation?
    - Does your knowledge about the law in anyway influence the kind of services you provide?
    - Do you think it provides sufficient grounds for women to seek for safe abortion services without fear of legal reprisals?

18. What about the providers, in your view does their knowledge of the law in any way influence the kind of services provided?

19. There are other places like hospitals where women seeking terminations can go, why do you think they prefer your services over the others?
20. What do you think about women seeking services?
21. Please share with me your views about abortion?
22. What are some challenges you face in your work?
23. What do you think can be done to solve it?

Closure

We have come to the end of the interview I want to thank you very much for your time. Is there anything else you would like to tell me? Anything you would have liked me to ask but I didn't or anything you need further clarification on

I wish to thank you once again

Appendix G: Data extraction forms for client records in abortion log books

Topic: A Mixed Methods Study of Post Abortion Women and Service Providers in the Ashanti region of Ghana

Background Information	***Coding Category***
1. Age	15-19……01 20-24……02 25-29……03 30-34……04 35-39……05 40-44……06 45-49……07 Not recorded… 00
2. Marital Status	Married ..... 01 Single… ..... 02 Cohabiting..... 03 Divorced.....04 Widowed.....05 Not recorded… 00
3. Occupation	Trader.....01 Civil/ Public servant…..02 Artisan.....03 Unemployed…..04 Not recorded… 00
Reproduction	***Coding category***
4. Number of Pregnancies	Once… .....01 2- 4 .....02 Above 4 ..... 03 Not recorded..... 00
5. Number of Children	None..... 01 1-3……02

	4-6.....03 Above 6 ..... 04 Not recorded..... 00

Family Planning	***Coding category***
6. Use of contraception at time of pregnancy (if no go to 8)	Yes.....01 No .....02 Not recorded 00
7. Method of contraception	Pills… .....01 Condoms.....02 IUD ..... 03 Injectables.....04 Withdrawal ..... 05 Implants.....06 Safe period.....07 Not recorded…..00
8. Post Abortion family planning offered (if no go to 10)	Yes.....01 No .....02 Not recorded…..00
9. Acceptance of method by client before discharge (if yes go to 12, if no go to 13)	Yes.....01 No .....02 Not recorded 00
10. Method of family planning accepted	Pills… .....01 Condoms.....02 IUD ..... 03 Injectables.....04 Implants.....05 Not recorded…..... 00
11. Reasons for non-acceptance	Fear of side effects.....01 Objection by partner 02

	Cost ..... 03 Not recorded 00

Induced Abortion	***Coding category***
12. Reason for abortion	Spacing..... 01 Limiting ..... 02 Partner did not want child ..... 03 Too young/old to have a child ..... 04 Wanted to continue schooling/job..... 05 No money to take care of child ..... 06 Others ..... 07 Not recorded 00
13. Gestational age at time of abortion	Between 1-3 mths… ..... 01 Between 4-6 mths..... 02 Above 6 mths..... 03 Not recorded 00
14. Actions taken to end pregnancy before reporting at health facility	Drank sugary beverages..... 01 Used herbal decoctions… ..... 02 Took cytotec ..... 03 Excessive physical activity..... 04 Dilation and curettage ..... 05 Others ..... 06 Not recorded 00
15. Provider seen before reporting at the health facility	Health professional… ..... 01 Pharmacist/chemist..... 02 Traditional medicine practitioner..... 03 Traditional birth attendant..... 04 Friend/relative ..... 05 Others ..... 06 Not recorded 00

16.	Complications experienced	Type	Mild	Moderate	Severe	Not recorded
		Fatigue/weakness	01	02	03	00
		Bleeding	01	02	03	00
		Perforation	01	02	03	00
		Abdominal cramps	01	02	03	00
		Fever	01	02	03	00
		Foul smelling vaginal discharge	01	02	03	00
17.	Knowledge of the law	Yes..... 01 No .....02 Not recorded 00				
18.	Outcome recording	Antibiotic treatment… ..... 01 Curette.....02 Hysterectomy ..... 03 Death ..... 04 Other.....00				

Appendix H: La Trobe University Ethics

LA TROBE UNIVERSITY

University Human Ethics Committee

RESEARCH OFFICE

MEMORANDUM

To:	**Professor Angela Taft, Judith Lumley Centre, College of SHE** **Mercy Nana Akua Otsin, Judith Lumley Centre, College of SHE**
From:	**Senior Human Ethics Officer, La Trobe University Human Ethics Committee**
Subject:	**Review of Human Ethics Committee Application No. HEC17-009 Mod 1**
Title:	**A mixed methods study of Post Abortion Women and Service Providers in the Ashanti region of Ghana**
Date:	**15 September 2017**

Thank you for submitting your modification request for ethics approval to the La Trobe University Human Ethics Committee (UHEC) for the project referred to above. The UHEC has reviewed and approved the following modification/s which may commence now:

- **Interviews with women who have had an abortion to increase from 20 to 50 participants.**
- **Interviews with pharmacists to increase from 5 to 10.**
- **Interviews with traditional herb practitioners to increase from 5 to 10.**
- **Interviews with service providers in a health setting to increase from 10 to 15.**

Please note that your request has been reviewed by a sub-committee of the UHEC to facilitate a decision before the next Committee meeting. This decision will require ratification by the UHEC and it reserves the right to alter conditions of approval or withdraw approval at that time. However, you may commence prior to ratification and you will be notified if the approval status of your project changes.

The following standard conditions apply to your project:

- **Limit of Approval.** Approval is limited strictly to the research proposal as submitted in your application while taking into account any additional conditions advised by the UHEC.

- **Variation to Project.** Any subsequent variations or modifications you wish to make to your project must be formally notified to the UHEC for approval in advance of these modifications being introduced into the project. This can be done using the appropriate form: *Modification to Project – Human Ethics* which is available on the Research Office website at http://www.latrobe.edu.au/researchers/ethics/human-ethics. If the UHEC considers that the proposed changes are significant, you may be required to submit a new

Appendix I: Ghanaian Ethics

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF MEDICAL SCIENCES / KOMFO ANOKYE TEACHING HOSPITAL
COMMITTEE ON HUMAN RESEARCH, PUBLICATION AND ETHICS

Our Ref: CHRPE/AP/547/17

14th November, 2017.

Prof. Angela Taft
Latrobe University
School of Nursing and Midwifery
Judith Lumley Centre
MELBOURNE, AUSTRALIA.

Dear Madam,

LETTER OF APPROVAL

Protocol Title: ***A Study of Post Abortion Women and Service Providers in the Ashanti Region of Ghana."***

Proposed Sites: ***Suntreso Hospital; Manhyia Hospital; Kumasi South Hospital; PPAG and Komfo Anokye Teaching Hospital.***

Sponsor: ***Latrobe University, Melbourne-Australia.***

Your submission to the Committee on Human Research, Publications and Ethics on the above named protocol refers.

The Committee reviewed the following documents:

- A notification letter from the Suntreso Government Hospital (study site) indicating approval for the conduct of the study in the Hospital.
- A Completed CHRPE Application Form.
- Participant Information Leaflet and Consent Form.
- Research Protocol.
- Interview Guide.

The Committee has considered the ethical merit of your submission and approved the protocol. The approval is for a fixed period of one year, beginning 14th November, 2017 to 13th November, 2018 renewable thereafter. The Committee may however, suspend or withdraw ethical approval at any time if your study is found to contravene the approved protocol.

Data gathered for the study should be used for the approved purposes only. Permission should be sought from the Committee if any amendment to the protocol or use, other than submitted, is made of your research data.

The Committee should be notified of the actual start date of the project and would expect a report on your study, annually or at the close of the project, whichever one comes first. It should also be informed of any publication arising from the study.

Yours faithfully,

Osomfo Prof. Sir J. W. Acheampong MD, FWACP
Chairman

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Appendix J: Participant information statement for women

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Bendigo
Albury-Wodonga
Mildura
Shepparton

Project Title: A mixed methods study of post abortion women and service providers in the Ashanti region of Ghana

This research is being conducted by Mercy N.A. Otsin from Ghana, a PhD candidate at the Judith Lumley Centre, School of Nursing and Midwifery at La Trobe University, Melbourne, Australia. You are invited to participate in this research because we value your opinion about choice and access to abortion in Ghana. Please read the information statement and feel free to ask any questions related to it.

What is this project about?

The research seeks to investigate factors informing the abortion decisions of Ghanaian women andto explore the knowledge, attitude and practices of persons involved in the provision of abortion services. Mixed methods approach which is a way of gathering information for research using the personal experiences as well as the numbers of people who have experienced the problem under investigation will be used. Information for the study will be gathered through a chat audit of the health records of post women and interviews among post abortion women and abortions service providers. Although there may not be any direct benefit to you as an individual, your participation may assist in developing a better understanding of the research problem and the necessary interventions aimed at reducing unsafe abortion and the uptake of safe abortions

Who are the researchers?

I will be your main contact person during the data collection phase of the research. The supervisors for this are project are Professor Angela Taft- principal supervisor, Dr Leesa Hooker- internal co-supervisor (La Trobe university), Associate Professor Kirsten Black- external co-supervisor (Department of Obstetrics, Gynaecology and Neonatology, Sydney University) and Professor Ellis Owusu-Dabo, of the Kumasi Centre for Collaborative Research, Ghana is also serving as the field work supervisor.

Who can participate?

To participate you must be a woman between the ages of 18-49 years who has experienced an abortion related complication.

What is involved?

Participation in this study involves individual interviews between forty minutes to an hour. The themes for discussion will revolve around factors informing the abortion decisions of Ghanaian women.

How will the information be recorded?

The interview will be digitally recorded

Can I check the transcript/ read publication?

The Interview transcript will be made available to you if you wish to see. The results of the study will be made available to you if you wish to see.

How will confidentiality be maintained?

I wish to assure you that all names and places that could make someone identify you as a participant will be de-identified. All the data generated from the study will be stored in a secured location, accessible to only the research team. Upon completion of the project, data gathered will be securely stored at La Trobe University, Melbourne, Australia in the research archives of the Judith Lumley Centre for a period of 5 years after which it will be destroyed.

Will I be at any risk?

It is not expected that you should come to harm as a result of participating in this study. Your participation is completely voluntary, and you can withdraw at any time should the study make you uncomfortable. Counselling is available at no cost to you, should the need arise as issues around abortion is sensitive.

What if I change my mind?

You have the right to withdraw from active participation in this project at any time. You may also request that data arising from your participation are not used in the research project provided that this right is exercised within four weeks of the completion of your participation in the project. You are asked to complete the "Withdrawal of Consent Form" or to notify the researcher by email or telephone that you wish to withdraw your consent for your data to be used in this research project.

How will the results be disseminated?

The results of the data will be disseminated in the form of a doctoral thesis. It will also be disseminated in the form of publications, conference presentations and policy briefs.

How will I be renumerated?

There are no financial gains for participating in this project. However, a snack and a gift voucher worth twenty dollars will be provided as a token of appreciation for your participation.

How do I contact the researchers?

You can contact me on +233-243607621 (email- mercyotsin@gmail.com)

You are also able to contact my supervisors on:

Professor Angela Taft on A.Taft@latrobe.edu.au

Dr Leesa Hooker on l.hooker@latrobe.edu.au

Associate Professor Kirsten Black on kirsten.black@sydney.edu.au and

Professor Ellis Owusu-Dabo on owusu-dabo@kccr.de

If you have any complaints or concerns about your participation in the study that the researcher has not been able to answer to your satisfaction, you may contact the Senior Human Ethics Officer,

Ethics and Integrity, Research Office, La Trobe University, Victoria, 3086 (P: 03 9479 1443, E: humanethics@latrobe.edu.au). Ethics approval reference number: HEC17-009

Appendix K: Participant information statement for formal abortion providers

COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

School of Nursing and Midwifery
Judith Lumley Centre
La Trobe University
Victoria 3086 Australia
MELBOURNE CAMPUSES
Bundoora
Collins Street CBD
Franklin Street CBD
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Bendigo
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Who can participate?

To participate you must be a hospital staff who helps women in ending their pregnancies

What is involved?

Participation in this study involves individual interviews between forty minutes to an hour. The themes for discussion will revolve around the knowledge, attitude and practices about abortion provision in Ghana.

How will the information be recorded?

The interview will be digitally recorded

Can I check the transcript/ read publication?

The Interview transcript will be made available to you if you wish to see. The results of the study will also be made available to you if you informed the researcher.

How will confidentiality be maintained?

I wish to assure you that all names and places that could make someone identify you as a participant will be de-identified. All the data generated from the study will be stored in a secured location, accessible to only the research team. Upon completion of the project, data gathered will be securely stored at La Trobe University, Melbourne, Australia in the research archives of the Judith Lumley Centre for a period of 5 years after which it will be destroyed.

Will I be at any risk?

It is not expected that you should come to harm because of participating in this study. Your participation is completely voluntary, and you can withdraw at any time should the study make you uncomfortable.

What if I change my mind?

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and Integrity, Research Office, La Trobe University, Victoria, 3086 (P: 03 9479 1443, E: humanethics@latrobe.edu.au). Ethics approval reference number: HEC17-009.

Appendix L: Participant information statement for informal abortion providers

COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

School of Nursing and Midwifery
Judith Lumley Centre
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Victoria 3086 Australia
MELBOURNE CAMPUSES
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Project Title: A mixed methods study of post abortion women and service providers in the Ashanti region of Ghana

This research is being conducted by Mercy N.A. Otsin from Ghana, a PhD candidate at the Judith Lumley Centre, School of Nursing and Midwifery at La Trobe University, Melbourne, Australia. You are invited to participate in this research because we value your opinion about choice and access to abortion in Ghana. Please read the information statement and feel free to ask any questions related to it.

What is this project about?

This research seeks to investigate factors informing the abortion decisions of Ghanaian women and to explore the knowledge, attitude and practices of persons involved in the provision of abortion services. Mixed methods approach which is a way of gathering information for research using the personal experiences as well as the numbers of people who have experienced the problem under investigation will be used. Information for the study will be gathered through a chat audit of the health records of post women and interviews among post abortion women and abortions service providers. Although there may not be any direct benefit to you as an individual, your participation may assist in developing a better understanding of the research problem and the necessary interventions aimed at reducing unsafe abortion and improving the uptake of safe abortions

Who are the researchers?

I will be your main contact person during the data collection phase of the research. The supervisors for this are project are Professor Angela Taft- principal supervisor, Dr Leesa Hooker- internal co-supervisor (La Trobe university), Associate Professor Kirsten Black- external co-supervisor (Department of Obstetrics, Gynaecology and Neonatology, Sydney University) and Professor Ellis Owusu-Dabo, of the Kumasi Centre for Collaborative Research, Ghana is also serving as the field work supervisor.

Who can participate?

In order to participate you must be a pharmacist, chemical seller or herbal medicine seller who helps women to end their pregnancies

What is involved?

Participation in this study involves individual interviews between forty minutes to an hour. The themes for discussion will revolve the knowledge, attitude and practices about abortion provision in Ghana.

How will the information be recorded?

The interview will be digitally recorded

Can I check the transcript/ read publication?

The Interview transcript will be made available to you if you wish to see. The results of the study will be made available to you if you inform the researcher.

How will confidentiality be maintained?

I wish to assure you that all names and places that could make someone identify you as a participant will be de-identified. However, should any issue with legal implications arise during the interview confidentiality cannot be guaranteed as you will be reported to the appropriate legal authorities. All the data generated from the study will be stored in a secured location, accessible to only the research team. Upon completion of the project, data gathered will be securely stored at La Trobe University, Melbourne, Australia in the research archives of the Judith Lumley Centre for a period of 5 years after which it will be destroyed.

Will I be at any risk?

It is not expected that you should come to harm as a result of participating in this study. Your participation is completely voluntary and you can withdraw at any time should the study make you uncomfortable.

What if I change my mind?

You have the right to withdraw from active participation in this project at any time. You may also request that data arising from your participation are not used in the research project provided that this right is exercised within four weeks of the completion of your participation in the project. You are asked to complete the "Withdrawal of Consent Form" or to notify the researcher by email or telephone that you wish to withdraw your consent for your data to be used in this research project.

How will the results be disseminated?

The results of the data will be disseminated in the form of a doctoral thesis. It will also be disseminated in the form of publications, conference presentations and policy briefs.

How will I be renumerated?

There are no financial gains for participating in this project. However, a snack and a gift voucher worth twenty dollars will be provided as a token of appreciation for your participation.

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You are also able to contact my supervisors on:

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Professor Ellis Owusu-Dabo on owusu-dabo@kccr.de

If you have any complaints or concerns about your participation in the study that the researcher has not been able to answer to your satisfaction, you may contact the Senior Human Ethics Officer,

Ethics and Integrity, Research Office, La Trobe University, Victoria, 3086 (P: 03 9479 1443, E: humanethics@latrobe.edu.au). Ethics approval reference number: HEC 17-009.

Appendix M: Consent forms

COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

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Mildura
Shepparton

Project Title:

I,_____, have read or have had read to me and understood the **participant information statement** and **consent form,** and any questions I have asked have been answered to my satisfaction. I agree to participate in the project by attending an interview which will last between forty minutes to an hour. I understand that even though I agree to be involved in this project, I can withdraw from the study at any time, and can withdraw my data up to four weeks following the completion of my participation in the research. Further, in withdrawing from the study, I can request that no information from my involvement be used. I agree that research data provided by me or with my permission during the project may be included in a thesis, presented at conferences and published in journals on the condition that neither my name nor any other identifying information is used. I agree that the interview be audio recorded to aid in recollection of information provided. Yes ☐ No ☐

Participant's Name (block letters): ……

Signature: Date:

Researcher's Name (Printed): ……..

Signature: Date:

Appendix N: Withdrawal of consent for use of data form

COLLEGE OF SCIENCE, HEALTH AND ENGINEERING

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I,_____, wish to WITHDRAW my consent to the use of data arising from my participation in this project. Data arising from my participation must NOT be used in this research project as described in the Participant Information Statement and Consent Form. I understand that data arising from my participation will be destroyed provided this request is received within **four weeks** of the completion of my participation in this project. I understand that this notification will be retained together with my consent form as evidence of the withdrawal of my consent to use the data I have provided specifically for this research project.

Participant's name (printed): ……

Signature:…… Date:…….

Please return this form to Mercy Nana Akua Otsin, 18743233@students.latrobe.edu.au, 0243612076. Ethics approval reference number: HEC-17-009