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Heidegger's Hermeneutic Phenomenology and the Application to Ghanaian Women's Experiences of Unsuccessful Invitro Fertilisation (IVF) Treatment

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Heidegger's Hermeneutic Phenomenology and the Application to Ghanaian Women's Experiences of Unsuccessful Invitro Fertilisation (IVF) Treatment

DECLARATION

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DEDICATION

I am grateful to the Almighty God for seeing me through this journey successfully- I have come to this far only because you made a way.

I am sincerely thankful to Dr Nicki Fouché, for her invaluable support throughout my research journey.

To Mama Salo God bless you for taking care of my Obrempong when I went away to study.

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To my loving husband, your words of encouragement and support, were timely and to our son Obrempong, you gave up everything when you endured early separation throughout the entire period of study. You are one in a million, I feel your smile.

To the millions of women who are infertile, and seeking IVF treatment- this is for you, know this, you are not alone in this journey. You will smile again.

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Notwithstanding all these, I am entirely responsible for any error of fact, interpretation, omission or commission in this thesis.

ABSTRACT

Ghanaian women experiencing infertility problem, have been seeking invitro fertilisation treatment in the quest for motherhood, however there is a dearth in the nursing studies researching this phenomenon. It appears that the concept and meanings of infertility is inadequately explored from the perspective of women experiences following unsuccessful invitro fertilisation treatment. In particular, it is vital to be knowledgeable about the challenges women encounter when undergoing IVF treatment and following unsuccessful procedure.

The study sought to gain a deeper knowledge and to understand the *meanings* women struggling with infertility and its treatment experience and how invitro fertilisation treatment failure affects women in their everyday life.

To unearth the women perception and meaning attributed to their experiences of unsuccessful infertility treatment, Heidegger's philosophy of phenomenology underpinned this study. A semi-structured opening question and further probing questions were used to gather information which was reduced to sub-themes and main themes which captured the participant's lived experiences of unsuccessful invitro fertilisation treatment. I adopted van Manen's (1990) six steps of research activities as a structure to unravel the participants' phenomenological conversations.

Applying Heidegger's concept of the three modes of *existence* (Existenze): *authenticity*, *inauthenticity* and *undifferentiatedness*, four major themes were identified:

1. **Seeking wholistic and *authentic* care-** *authenticity*
2. **Facing up to the *Angst*-** *inauthenticity*
3. **The vulnerable self -** *inauthenticity*
4. **Living with infertility (*being-in-the-world-of-motherless*) -** *undifferentiatedness*

The participants' phenomenological conversations and their stories have revealed a range of challenges Ghanaian women who seek invitro fertilisation treatment go through. The study contribute significantly by giving insight to the painful experiences Ghanaian women go through when seeking invitro fertilisation treatment and has given a voice to how assisted reproductive technologies are currently experienced in the Ghanaian context. From the women's narrative, it appeared that their emotional and informational needs were not being met and were not being cared for as expected. The findings provide some direction regarding the needs of women experiencing infertility for information, support and advocacy in their pursuit of assisted reproductive technology services in Ghana.

There is a critical need to simplify invitro fertilisation treatment and provision of safe, affordable procedure so that the average Ghanaian women can access it.

Key Words: Heidegger, Infertility, Modes of *being*, Phenomenology, Unsuccessful IVF treatment.

LIST OF ABBREVIATIONS

AI	-	Artificial insemination
ACCOG	-	Association of childless couples of Ghana
ARTs	-	Assisted Reproductive Technologies
ASRM	-	American Society for Reproductive Medicine
CAM	-	Complementary and Alternative Medicine
DHS	-	Demographic and Health Surveys
DPM	-	Dual Process Model
ESHRE	-	European Society of Human Reproduction & Embryology.
ET	-	Embryo Transfer
FGD	-	Focus Group Discussion
GET	-	Gamete and Embryo Cryopreservation
GIFT	-	Gamete Intra Fallopian Transfer
HCG	-	Human Chorionic Gonadotropin
HFEA	-	Human Fertilisation and Embryology Authority
HREC	-	Human Research and Ethics Committee
ICMART	-	International Committee for Monitoring Assisted Reproductive Technologies
ICSI	-	Intra Cytoplasmic Sperm Injection
IVF	-	In vitro Fertilisation
NICE	-	National Institute for Clinical Excellence
PCOS	-	Polycystic Ovarian Syndrome
PRB	-	Population Reference Bureau
QOL	-	Quality of Life
TET	-	Tubal Embryo Transfer
TFR	-	The Average Total Fertility Rate
WHO	-	World Health Organisation
ZIFT	-	Zygote Intra Fallopian Transfer

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CHAPTER ONE

Heidegger's Hermeneutic Phenomenology and the Application to Ghanaian Women's Experiences of Unsuccessful Invitro Fertilisation (IVF) Treatment

Introduction

The chapter sets the stage of the thesis. The background to the study, the meaning and the causes underlying infertility among women and men in the world is discussed. It also outlines the prevalence and experiences as, well as the consequences of infertility globally. The purpose, aims and objectives of the study stated. The importance of the study, research questions are outlined. A summary of the chapter is stated.

Background to the Study

Infertility is challenging situation a woman may encounter in her *life-world* particularly, women in the low-resourced African continent (Ombelet & Goossens, 2017). Fertility is highly regarded in many cultures within Ghanaian communities and, having children is among the most essential purpose of life-giving for women generally. Women who suffer from infertility may endure considerable societal humiliation in many African cultures. (Fledderjohann & Johnson, 2016). It is reported that more than 15% of all women and couple experiencing fertility problems globally, have resorted to in vitro fertilisation (IVF) treatment in the quest of parenthood (Frederiksen, Farver-Vestergaard, Skovgård, Ingerslev, & Zachariae, 2015).

Invitro fertilisation treatments have become a powerful medical tool in helping millions of people achieve their hopes of having a baby. For some women, treatment will not be successful, leaving many to cope with unresolved infertility. In sub-Saharan African countries such as Botswana, Cameroon, Chad, Ethiopia, the Gambia, Ghana, Kenya, Malawi, Mali, Mozambique, Rwanda and Zimbabwe, limited information is available concerning the ways infertility care is provided, used and the context in which the experiences take place (Gerrits & Shaw, 2010). It is, therefore, imperative to understand the effect that seeking IVF treatment may have on Ghanaian women's life in the aftermath of unsuccessful treatment. This study may assist in developing highly indigenous, culturally relevant practical intervention and models to guide effective nursing practices in ART/IVF services about ‘what works for whom’ for this population (Frederiksen et al., 2015, p. 15).

Definition of Infertility

Infertility is perceived as a reproductive health problem, where more than 15% of the populace worldwide have the problem fallen pregnant naturally (Gerrits et al., 2017; WHO, 2016). Infertility may be defined as a sexually active couple not being able to fall pregnant after one year of regular sex without using any protection (Greil, Slauson-Blevins, & McQuillan, 2010; WHO, 2017). Infertility can also be describe as the failure of sexually active couples or individuals to fall pregnant after a period of one year (Vander Borght & Wyns, 2018).

Infertility is the result of an interruption, cessation, or disorder of body functions, organs of the male or female reproductive tract which prevents the conception of a child or the ability to carry a pregnancy to delivery or term. The period of unprotected intercourse with failure to conceive should be about 12 months before an infertility evaluation is initiated, unless otherwise (American Society for Reproductive Medicine, 2019).

This means a woman or couples finds it difficult not able to fall pregnant within one year of marriage or being together as a couple. However, women over of 35 years of age, having difficulty to fall pregnant after six months is commonly considered infertile (WHO, 2017).

Infertility may be primary or secondary. A woman who has never fallen pregnant more than one years of frequent sexual intercourse without protection can be described as experiencing primary infertility (Inhorn, 2009; Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012; Zegers-Hochschild et al., 2017; Zegers-Hochschild, Crosby, & Schwarze, 2019). Secondary infertility is also referred to as a woman who has had one or more pregnancies irrespective of the final outcome but now finding it difficult with conception of a child (Mascarenhas et al., 2012; Vander Borght & Wyns, 2018). Globally secondary infertility rates is estimated to around 10% and primary infertility, among women between the ages of 20 to 44 years is estimated to be 2% (Mascarenhas et al., 2012).

Infertility assessment and management are generally tedious and often may result in many negative outcomes (Read et al., 2014). Combined and unexplained outcomes are other forms of childlessness. Combined infertility result from a range of factors such as hereditary or immune system disorders that interfere with pregnancy. Sometimes, it is of the view that there would be no problem with either the woman or her partner, but then they cannot conceive unless they seek medical assistance. Unexplained infertility is another form of infertility where the underlying cause is not recognised or cannot be explained medically (Zegers-Hochschild et al., 2017).

Causes of Infertility

The underlying causes of infertility are manifold and, in some cases, the issue about infertility may result from either the woman or the partner having problems or there may be many factors combined to interrupt with conception of a child.

Infertility can be grouped under three major causes included: female factor (that is, tubal damage, endometriosis); male factors (sperm dysfunction) and a combination of male and female factors (Agarwal etal, 2015, HFEA, 2018). It is estimated that the causes of female infertility account for 45% of cases, males are found to be exclusively responsible for 20-30% of infertility cases whereas 25% of cases are due to combined or unexplained causes (Agarwal, Mulgund, Hamada, & Chyatte, 2015; Alpher, Brinsden, Fischer, & Wikland, 2002; HFEA, 2014).

The causes of infertility also vary with geographical location and may affect both genders or be specific to one gender which is also influenced by socioeconomic factors (Ombelet, Cooke, Dyer, Serour, & Devroey, 2008; Vander Borght & Wyns, 2018). It is reported that there is also variation in the pattern of underlying causes among regions in the developing countries (Inhorn and Patrizio, 2015). In developing countries the major causes of infertility have been attributed to tuberculosis (causing ill health and genital tract infections), venereal disease (especially gonorrhoea), post-abortive and postpartum infections, and malnutrition (Inhorn & Patrizio, 2015; Ombelet, 2013; WHO, 2017). Another common cause of infertility is bilateral tubal blocking which is prevalent among young women generally, in developing countries which can be treated by IVF with embryo transfer (Ombelet et al., 2008).

Prevalence and Experiences of Infertility

Infertility is a global challenge for many women and couples. It is estimated that 3.5–16.7% of the general populace experiences difficulty conceiving (Boivin, Bunting, Collins, & Nygren, 2007; Datta et al., 2016). In fact, recent studies have reported that between 80 million and as many as 186 million people in the world are reported to have experienced infertility problems, of which most of them live in sub-Saharan Africa, Asia and the Middle East (Inhorn & Patrizio, 2015; Polis, Cox, Tunçalp, McLain, & Thoma, 2017; WHO, 2017). The estimated range of infertility among individuals of reproductive age (20-44 years) in Ghana is between 15–18 % (Larsen, 2000; Mascarenhas et al., 2012).

Infertility significantly impacts on every facets of individual's life and well-being (Fledderjohann, 2012; Greil, Shreffler, Schmidt, & McQuillan, 2011; Greil, Slauson-Blevins, et al., 2010; Hollos & Larsen, 2008; Naab, Brown, & Heidrich, 2013). However, women often report negative consequences of associated with the diagnosis if infertility than men (Greil, Slauson-Blevins, et al., 2010). The problem of infertility is even more devastating when the individual seeks ART services treatment and compounded when the treatment procedures are unsuccessful. Unfortunately, this dilemma continues to bother women worldwide, especially women in poor-resource settings as a result of socioeconomic status and inadequate access to health services (Ombelet & Goossens, 2017).

It has been established that the significances of infertility are often intense in developing countries as compared to Western societies like The Netherlands, United State of America (USA) and United Kingdom (UK) (Dhont, Van de Wijgert, Coene, Gasarabwe, & Temmerman, 2011; Greil, Slauson-Blevins, et al., 2010; Ombelet, 2011; Ombelet et al., 2008; Tabong & Adongo, 2013). Infertility affects both partners; ironically, the female partners are regularly accused for their infertility even when males are infertile (Cui, 2010; Hörbst, 2010; Wischmann & Thorn, 2013). In particular, women experiencing difficulty to fall pregnant are labelled as barren and may be deprived family inheritance as a consequence of inability to conceive with a child (Whitehouse & Hollos, 2014). Paradoxically this may lead sufferings such as emotional and psychological strain, verbal and physical abuse bigamy (Daar & Merali, 2002; Dyer, Abrahams, Mokoena, Lombard, & van der Spuy, 2005; Dyer, Abrahams, Mokoena, & van der Spuy, 2004; Gerrits & Shaw, 2010; Van Balen & Bos, 2009).

Consequences of Infertility in Ghana

In Ghana, studies have shown that individual with fertility problems suffer from psychological and emotional distresses such pain, sorrow, worrying, social humiliation, and divorces. It is believed a woman must give birth for her to be accorded the needed respect and social status. If a woman does not become pregnant following marriage she is first to be blamed and soon after she is referred as barren (Donkor & Sandall, 2007; Fledderjohann, 2012; Naab et al., 2013). The study conducted by Donkor and Sandall (2007), (N=6I5) reported that 23% (n=139) of the women experienced moderate stigma and 41% (n=253) and severe infertility-related perceived stigma (Donkor & Sandall, 2007). In many rural parts of Ghana, children are considered as assets for economic security in old age as well as a symbol of a higher status. In these instances, motherhood is considered as the essential role of women for a respected female identity (Alhassan, Ziblim, & Muntaka, 2014).

Assisted Reproductive Technologies (ARTs) Services

Assisted Reproductive Technologies (ARTs) denotes all procedures that involve the handling of human eggs and semen to help establish a pregnancy. The common Assisted Reproductive Technologies (ARTs) procedures include In-vitro Fertilisation (IVF) and trans-cervical embryo transfer, gamete intra fallopian transfer (GIFT). The procedure also include zygote intra fallopian transfer (ZIFT), tubal embryo transfer (TET), gamete and embryo cryopreservation (GET), oocyte and embryo donation and gestational surrogacy and Intra Cytoplasmic Sperm Injection (Boivin & Lancastle, 2010; Ola, 2012).

It is reported that intentional childlessness is not familiar in African continent Though many people around the globe are currently decided not to have children (Fledderjohann, 2012; Letherby, 2010). In vitro fertilisation treatment and embryo transfer (IVF-ET) has provided couples and women diagnosed of infertility with the possibility of pregnancy but the, treatment has the risk of failure for women to become pregnant (Hammarberg, Astbury, & Baker, 2001).

In vitro fertilisation (IVF) treatment provides the hope of pregnancy for women, but do not always turn this hope into realism. The IVF treatment process is often present many negative consequences and affect the total well-being of both partners (Cousineau & Domar, 2007). Furthermore, the success rates of ART programmes such as IVF treatments comparatively remain low (Human Fertilisation and Embryology Authority, 2018), this make the result of such treatments indeterminate. In spite of these adverse circumstances and challenging outcome women facing fertility problems courageously continue to seek for ART procedures.

Lesley Brown (32 years of age) gave birth to the world's first test-tube baby who was born on 25th of July, 1978. This brought hope to many women who found themselves in similar situations. Her revolutionary birth by IVF treatment heralded the genesis of a new era in reproductive technology. Since the introduction of IVF treatment in the late 1970s, 8 million babies have been born worldwide from IVF treatment (Loughlin, 2012). In the UK, approximately 3.5 million offspring have been delivered with ARTs (Chambers, Sullivan, Ishihara, Chapman, & Adamson, 2009).

IVF-ET Failure

In vitro fertilisation (IVF) treatment encompasses over 99% of Assisted Reproductive Technology (ART). Research shows that about 5-8 million children worldwide have been delivered through ART (European Society of Human Reproduction and Embryology, 2012; Kissin, Jamieson, & Barfield, 2014; Loughlin, 2012; Zegers-Hochschild et al., 2019). There has been literature reporting that ART services has brought hope to women and couples living with infertility the possibility of parenthood. Nevertheless, ART treatment often result in disappointments, which frequently may lead to a period of grief reactions and loss of hope to cope with this stressful experience (Johansson & Berg, 2005; Lee et al., 2010; Lukse & Vacc, 1999). The global IVF success rates remain low with a live birth rate per IVF cycle ranging between 32-37% in Europe and the USA, respectively. This figure is lower among women of 36 years and older (Adamson et al., 2018; Human Fertilisation and Embryology Authority, 2018; Kupka et al., 2014; Sunderam et al., 2018). Fertility treatment and IVF are often unsuccessful. Global statistics from 2008 to 2010 – 4,461,309 ART cycles were instigated, accounting for 1,144,858 babies born worldwide. A fraction of women aged 40 years or more undertaking non-donor ART increased from 20.8 to 23.2% from 2008 to 2010 (Dyer et al., 2016).

Global statistical figures by De Geyter etal (2018), estimated successful IVF treatment for the second quarter of 2014 to be as high as 34% for women aged 34 years and below and drastically reduces to a little above 1% beyond this age bracket. (De Geyter et al., 2018).This result makes the outcome of such procedures uncertain. Despite the encouraging success rate, there is a failure of 63%, which has severe consequences for women who endured physical, financial and psychological burdens for these procedures.

A study conducted by Verhaak et al. (2005), reported that after one treatment cycle, only 20% of the participants became pregnant. Despite attempts of three or more cycles, half of the women had still not become pregnant (Human Fertilisation and Embryology Authority, 2018; Verhaak, Smeenk, Van Minnen, Kremer, & Kraaimaat, 2005). Notwithstanding these difficulties and adverse circumstances, women living with fertility problems continue to seek assisted reproductive treatment to fulfil the dream of becoming mothers.

Complexity of ART Services in Developing Countries

In under developed countries, ART has seen less development than in higher-income countries. One major factor influencing infertility and its treatment is accessibility to health care services (Inhorn & Patrizio, 2015). Unfortunately, ART services cost so high for infertility couples and women who need it most are unable to access it in under develop countries in Africa. In Ghana, ART is not covered by the Health Insurance system. Also, IVF treatment is not integrated in public health care programme in view of this the motherless have to pay out of pocket (approximately 5000 U$D) for these expensive treatments (Adageba, Maya, Annan, & Damalie, 2015; Hörbst & Gerrits, 2016; Ola, 2012; Ombelet, 2011, 2013).

The African continent is regarded as having the least number of IVF clinics and centres (Inhorn & Patrizio, 2015). Also, the centres and physicians providing ART are mostly in private practices found in big towns. This situation makes it very difficult and expensive for women and couples to travel to these cities to access the IVF services (Hörbst & Gerrits, 2016; Ola, 2012). The lack of regular record keeping for IVF procedure in the African continent makes it difficult and inaccurate to compare results in sub-Saharan Africa to other areas worldwide. Which also makes it impossible to assess success rates. This evidence supports that the need for IVF services are not being met as expected in sub-Saharan Africa (Adageba et al., 2015; Hörbst & Gerrits, 2016; Ola, 2012).

It is reported that in West Africa, Nigeria was the first country to establish an IVF clinic in the year 1984 and baby was born at the Lagos University Teaching Hospital (LUTH) in Nigeria in March 1989 (Giwa-Osagie, 2002). Consequently, ARTs have spread to other countries within the sub-region such as Cameroon (Ngwafor, 1994), Gambia (Sundby, 2002), Ghana (Donkor & Sandall, 2007; Gerrits, 2016), Mali and Uganda (Hörbst, 2016), Tanzania (Sundby & Larsen, 2006), and Zimbabwe (Sundby & Jacobus, 2001).

In Ghana, the first successful IVF procedure was done in 1995, introduced by a German-trained Ghanaian doctor who ran a private fertility clinic in Tema, which often, is referred to as the harbour city near to the greater Accra region. Since then, its popularity and usage have gradually increased.

An increasing number of hospitals and clinics are currently rendering fertility treatment, and other advanced assisted generative technologies (Gerrits, 2016; Hörbst & Wolf, 2014; Inhorn & Patrizio, 2015).

At present, fourteen private hospitals are recognised to render ARTs services of which 12 of the clinics are located in or closer to Accra, the capital of Ghana. The remaining two can be found in Kumasi in the Ashanti region, the second-largest metropolis in Ghana. Notwithstanding, all these centres are privately owned, thus making access and affordability difficult for the majority of Ghanaians (Hörbst & Gerrits, 2016; Inhorn & Patrizio, 2015).

Statement of the Research Problem

Infertility is a universal problem that affects the social, economic and psychological wellbeing of couples and Ghana is not an exception to the prevalence of infertility. Although the problem of infertility in Africa currently has received some attention of researchers (Dyer, 2008), infertility studies with respect to IVF are very limited in Ghana. Being a parent is undeniably one of the most universally desired goals for women and couples. In the traditional Ghanaian culture, parenthood is seen as an important social role for women and a respected female identity. Globally, infertility remains a major issue facing women living in poor-resourced allocation regions. Although globalisation of ART in many parts of the world, IVF services remain primarily inaccessible in Africa countries such as Ghana (Inhorn & Patrizio, 2015).

There is an attention-grabbing for ART in developing countries, where most infertility cases are generally caused by reproductive tract infection, which can only be treated best by ART (Giwa-Osagie, 2002). Despite the challenging nature of infertility in developing countries, it receives very little attention in terms of health planning and policy irrespective of the high prevalence and substantial unmet need for IVF services and Ghana is not an exception.

Compared with other health related issues of public concern ART is not a priority in Ghana (Naab et al., 2013). Assisted reproductive services in Ghana are predominantly privately-run clinics. Mostly the treatment centres are located only in the capital or huge cities which often require long distances to access these centres. Out of the 14 IVF centres in Ghana, 12 are in Accra the capital and Tema with the remaining two located in Kumasi the Ashanti region which is the second largest metropolis in Ghana.

Image 1: Ghana Map showing the Three IVF Centers

(worldatlas.com, 2012).

Ghanaian women who have been diagnosed with infertility problems have been seeking IVF treatment, however there is a paucity in the nursing literature which explores this experiences. In Ghana, no studies have used qualitative methods using the philosophy of Heidegger's hermeneutic phenomenology to explore the experiences of unsuccessful IVF treatment. It appears that the whole concept of infertility and subsequent treatment has not been sufficiently explored from the common meanings women diagnosed with infertility problems assign to this experience following unsuccessful IVF treatment.

Currently literature focuses mainly on the physical and the biological implications of infertility and does not describe the circumstances in which infertility management is experienced in the ART settings. The problem is that the unique experiences of Ghanaian women who undergone IVF treatment but the procedure was not successful have not been described, and as a result, they are poorly understood. Research on the distinctive meanings and detailed understanding of this intricate phenomenon is inadequate. There is therefore a large knowledge gap in literature on the subject und study. The consequence of this huge gap in knowledge is very serious. It is essential to comprehend the experience of infertility from the point of view of women who were not successful in the quest of motherhood through IVF treatment. Understanding the experiences of Ghanaian women who failed IVF treatment is paramount for nurses and other health care providers so they may provide appropriate interventions to this disenfranchised population. To promote healing among clients from these vulnerable population, it is important for nurses to understand the phenomenon of receiving care in the IVF care setting. This study therefore attempts to bridge this knowledge gap by exploring comprehensive the *life-world* of Ghanaian women with unsuccessful IVF treatment, subjectively experienced being cared for in the IVF care setting underpinned by Heidegger's hermeneutic phenomenology.The study intended to contribute to the nursing literature on the theoretical knowledge as it attempts to elucidate meaning women with infertility problems assigned to IVF treatment journey and their impact on quality of life.

Obtaining any depth knowledge of the women's lived experiences may assist healthcare providers and personnel (nurses and physicians) to offer better care focused and responsive to individual patient's need and values for persons undergoing IVF treatment.

Significance of the Study

Qualitative studies are often undertaken because some aspect of a phenomenon is poorly understood, and the researcher wants to develop a rich, comprehensive, and context-bound understanding of it. Evidence from the study should have the potential of contributing meaningfully to nursing knowledge. This study may enhance our understanding by enabling this group of women to share their stories and illuminate the meaning given to their individual experiences. This study may help to lay a foundation for practical recommendations that may inform the education of nurses and healthcare workers and guide interventions for women and their partners who cope with infertility and its treatments.

The impetus of this study began from my encounters with women experiencing infertility issues and repeated IVF treatment failures. The lived experienced of IVF treatment offered me an opportunity to give ‘voice’ to those Ghanaian women who are motherless. Currently, many Ghanaian women diagnosed as infertile are seeking IVF treatment. In view of this, healthcare professionals in ART settings need to be knowledgeable about women lived experiences to provide appropriate support and interventions for these motherless seeking IVF treatment in the quest of belonging to the mother world.

Understanding the range of responses to losses, and how infertility and its treatment affects the lives of this particular group of women, may enable care givers in the ART settings to gain valuable insight into the nature and meaning of the forfeiture following IVF treatment failure better. The findings may also add to the existing knowledge about IVF treatment.

In addition, this study may provide a starting point in which to continue to study the lived experiences of women with failed IVF treatment. Future research could be conducted to follow-up on areas of importance that will be highlighted in the study.

Purpose of the Study

The objective of the study is to explore the experiences of Ghanaian women who have undergone IVF treatment in pursuit of motherhood but have been unsuccessful. The goal is to obtain a detailed knowledge of how IVF treatment failure impact the lived experiences of women diagnosed as infertile.

The Phenomenon under Investigation

Infertility is a subjective experience which indeed seems evident in meaning of women’s *lived-world* needing no external objective proof. Therefore in this thesis, I have focused on a peculiar life event that seems undisputable evident in *meaning* in the *life-world* of women’s unsuccessful IVF treatment.

Aims and Objectives

This research aims to explore the *life-world* of Ghanaian women with unsuccessful IVF treatment in pursuit of motherhood. To be knowledgeable in the peculiar life experience of the phenomenon under investigation, the objectives are:

- To describe and interpret how the women make sense of the IVF treatment procedure.
- To illustrate how the IVF treatment experiences have affected the women's social and marital relationships, their career and financial situation.
- To explore the women's experiences after the unsuccessful IVF treatment and their future choices of becoming parents.

The Research Question

This question guided this study; *what meaning does unsuccessful IVF treatment hold for motherless women?*

Outline of the Thesis

The thesis has eight chapters. Chapter one provides the background of the study. The section gives a general overview of infertility and its consequences in developing countries. Also, it addresses the complexities of ARTs services in developing countries and the Ghanaian context. The phenomenon of interest and the significance of the thesis stated. It further outlines the aim and the objectives which guided the study.

Chapter two reviewed the nursing literature, which is relevant with the women's life-world with unsuccessful IVF procedure. The effect it has on patient life and delivery of patient care. The review of literature focuses on several studies on women experiences of unsuccessful IVF treatment across different countries. The selection criteria used to guide the process of literature review on the phenomenon under study stated. It describes the strategies for the literature search and the various definitions and concepts of the topic in question.

Chapter three focuses on the philosophical underpinning of the study. Heidegger's idea of phenomenology as a philosophy and the three modes of *being* presented in this chapter.

Chapter four details the methods and procedures undertaken for this study. The different approaches to qualitative research and the justification for the methodological decisions stated. A discussion of my ontological, epistemological and methodological pre-understanding of the study stated vividly. The chapter includes the methods of the study. Information gathering; methods and approaches and the unravelling of the phenomenological conversations presented. The section further outlines the ethical principles, as well as measures to guarantee the credibility of the study.

Chapter five, present and describe the emerging lived experience from the phenomenological conversations with the participants of their experiences of unsuccessful IVF treatment presented.

Chapter six explains the unravelling of the *meaning* of women's narratives. The themes that emerged from the narratives of the motherless lived experiences of unsuccessful IVF treatment discussed concerning the existing reviewed nursing literature. The various topics are examined based on the available research to determine areas of similarities and differences. This chapter highlights the new knowledge that will help improve ART services.

In Chapter seven, I propose a grief model using Heidegger's three *existential* modes of *being*: *authenticity*, *inauthenticity* and *undifferentiatedness.* The significance of the Dual Process Model (DPM) applies to Ghanaian women experiences of unsuccessful IVF treatment stated. The chapter ends with the conclusion of the model.

Chapter eight which is the final chapter provides the summary and recommendations of the study; a section of my overall reflections of the thesis stated. The research implications for clinical and nursing practice, policy and future research stated. The strengths, limitations, as well as the contribution of the study to knowledge, are then presented. The conclusion of the chapter and journal entry before the submission of the thesis provided.

Conceptual Definitions of Terms

A conceptual definition conveys the general theoretical meaning of the phenomenon under study, and uses key words and concepts to describe its properties. A number of key terms were used in the thesis which are defined in this section and engaged throughout the entire research process as a guide to the reader.

Assisted Reproductive Technologies (ARTs)

Assisted Reproductive Technologies (ARTs) refers to all treatments that involve the handling of human eggs and sperms for the purpose of helping establish pregnancy. The common ARTs procedures include In-Vitro Fertilisation (IVF) and trans cervical embryo transfer, gamete intra fallopian transfer (GIFT), zygote intra fallopian transfer (ZIFT), tubal embryo transfer (TET), gamete and embryo cryopreservation (GET), oocyte and embryo donation and gestational surrogacy and Intra Cytoplasmic Sperm Injection (ICSI) (Ola, 2012).

Attunement: Awareness of our surroundings as a function of mood; delineates what is important, what stands out, what matters

Authenticity: One lives up to what one feels to be significant even if it is at odds with what is socially acceptable. Discovering the world in my own way (Wrathall, 2013).

Dasein: Heidegger used the term *Dasein* which when translated from German, meaning ‘to be there’; a neutral term that allows us to see man as consciousness instead of a biological being (Inwood, 2000).

Embryo transfer (ET): Procedure in which embryo(s) are placed in the uterus or Fallopian tube.

Embryo transfer cycle: ART cycle in which one or more embryos are transferred into the uterus or Fallopian tube.

Facticity: The idea that we are able to understand ourselves as bound up in our own as well as others’ destiny. We ‘dwell alongside other persons. It comprises the situation in which ‘*Dasein* finds itself that affect its possibilities and is thrown into situations’ (Cass, 1998, p. 330).

Falleness: Means an absorption in Being-with-one-another, in so far latter guided by idle talk, curiosity and ambiguity (Inwood, 2000). Fallenness is the loss of *being* its Self (making things intelligible) through everydayness of *the they* (idle talk, search for novelty, and ambiguity).

Fertilisation: The penetration of the ovum by the spermatozoon and fusion of genetic materials resulting in the development of a zygote.

Implantation: The attachment and subsequent penetration by the zona-free blastocyst (usually in the endometrium) which starts 5-to-7 days following fertilisation.

Inauthenticity: Meaning, it is public. It is governed by norms available to everyone (Wrathall, 2013, p. 13) The mode assumed by someone who actively adopts a way of doing something, even though the person does not necessarily value that way of being externally.

Infertility: Infertility is the result of a disease (an interruption, cessation, or disorder of body functions, systems, or organs) of the male or female reproductive tract which prevents the conception of a child or the ability to carry a pregnancy to delivery (ASRM, 2019).

Initiated cycles: ART treatment cycles in which the woman receives ovarian stimulation, or monitoring in the case of spontaneous cycles, irrespective of whether or not follicular aspiration was attempted.

In Vitro Fertilisation treatment: A method of assisted reproduction procedure, that involves combining an egg and sperm in a laboratory dish. If the egg is fertilised and cell division begins, it is placed into the woman's uterus hoping the embryo will implant in the uterine lining and continue developing.

Motherless: In this study I chose to substitute the term childlessness with the term motherless

Sorge: German term meaning to care

The they (das Mann): This everyday way of being Heidegger names the *they (das Mann)*. Heidegger calls others in the world as the *they (das Mann*) to refer to anonymous every day way in which *Dasein* determines the possibilities for each individual being

Thrownness**:** The *facticity* of *Dasein's* being delivered over or thrown into situations without having a choice. That is, *Dasein* is delivered over to its being, in that it is subject to its attunement, which reveal what matters and how.

Undifferentiatedness: A mode where one is lost in a world where one passively assumes a position chosen from the public shared way of not taking charge of oneself. People exist in this mode most of the time since many of life's activities happen while we are in this mode.

World: This is described as the total beliefs, values, assumptions, experiences, meanings, opportunities, and cultural background shared by a given society. Heidegger believes the world of people to be always preceding to an individual's own existence in the world which includes the world inhabited in the past and focused in the future (Dreyfus, 1991). A person can exist in three different modes of being - *authenticity, inauthenticity, undifferentiated* modes of existence.

Summary

This chapter gives a general overview and consequences of infertility in developing countries as well as the complexities accessing ART services in a poor resource setting. It may be concluded that the effects of infertility and IVF treatments are enormous in developing countries.

The chapter which follows deliberates on the review of the nursing literature on lived experiences of women with unsuccessful IVF treatment from relevant and related studies. The discussion may offer insights into studies from countries that offer IVF treatment.

CHAPTER TWO

Review of the Nursing Literature

Introduction

The chapter provides a review of the literature, which is relevant to the phenomenon under study of lived experiences of women with unsuccessful IVF treatment and the effect that it has on patient quality of life and the delivery of patient care. The literature review may assist the reader in understanding better the research topic, which may otherwise be hidden so that they can engage with the phenomenon under investigation (Aveyard, 2010; Polit & Beck, 2014). A revision of the literature validates the study while giving a point of reference about the topic in question. Finally, a revision of the literature review will serve to ascertain any gaps in knowledge of the phenomenon and justification for the study (Polit & Beck, 2014).

The selection criteria used to guide the process of literature review on the phenomenon under study is presented in (Table 1) below:

INCLUSION CRITERIA	EXCLUSION CRITERIA
(1) Study that focuses on the phenomenon under investigation	Focuses on experiences of infertility only, No insight on lived experiences of IVF treatment
(2) Focused on experiences of women or women and couples	Focused on experiences of men, does not include women or couples
(3) Studies which used mixed method but where both the qualitative findings and the quantitative results are presented separately.	Focused on mixed method studies where only the quantitative findings presented, and did not include narratives in qualitative findings.
(4) Study must be presented in English language	Studies that were not published in English languages were excluded

Table 1: Selection Criteria for the Literature Search.

The Search Strategy

The literature search focused on women's experiences of unsuccessful IVF procedure and the effects on women's quality of life. Electronic database search was conducted to expand the prevailing literature. I searched through "**PubMed, Web of Science, PsycINFO, Scopus,"** and relevant **"Academic Search Engines"** through "**EBSCO Host"** and "**Cumulative Index to Nursing and Allied Health (CINHAL)".** MeSH terms were used for the various searches. The primary keywords used were *Heidegger*, *phenomenology*, *unsuccessful IVF treatment*, and *IVF treatment/in vitro fertilisation*, *artificial reproductive techniques*, *childlessness, infertility* and *stress*. These keywords were either used separately or used in different combinations to find the relevant literature. The years in which the studies were published range from 1999 to 2018. The first literature review started in 2015, whilst literature was constantly revised to cover current published studies.

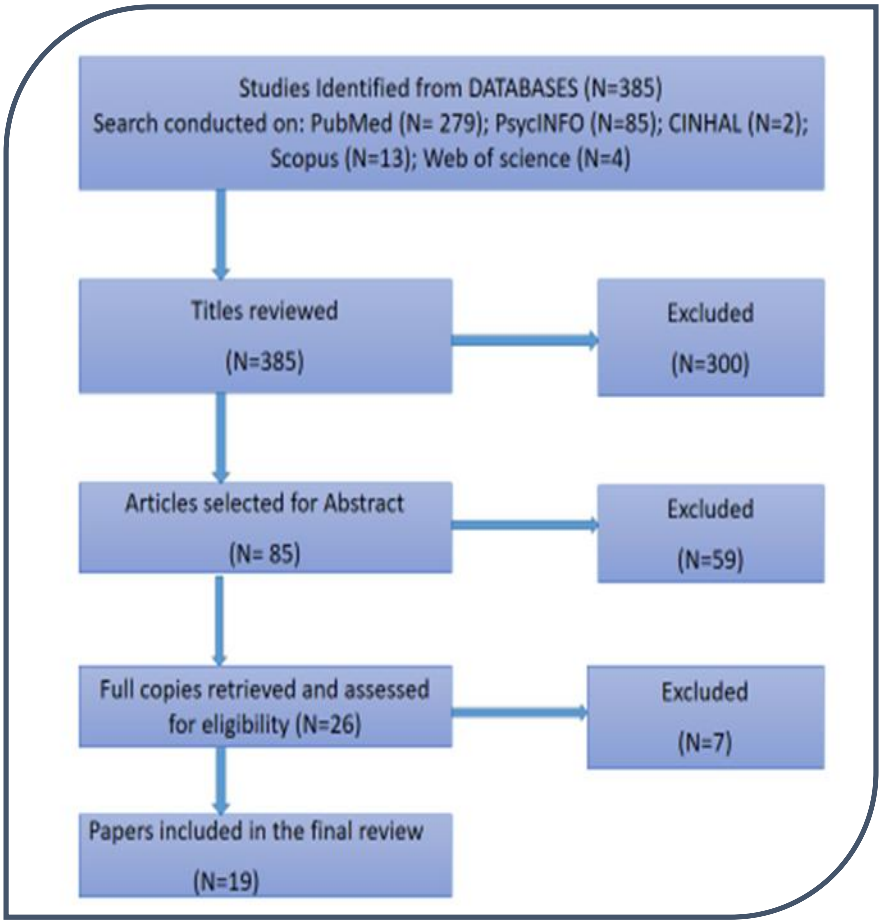

Figure 1: A Flow Chart Illustrating Data Search and Extraction Process.

Title, Abstract and Full Text Review

The studies recognised from the databases generated 383 scientific journal articles. This is followed by reading titles to identify their relevance to the phenomenon under investigation. Titles of each article reviewed, and those that had no reference to unsuccessful IVF treatment excluded. A total of 85 remained after irrelevant articles and replicas taken out.

The next step of extraction process involved selection of abstracts, which was made to examine the objectives of my study, methodology and process involved in collecting data. At the end of this exercise, an additional (N=59) journal article excluded if they did not meet the inclusion criteria. (See Table 2). At this stage, journal articles which did not focus on women's experiences of fertility treatment if they did not include the experiences of IVF/ET treatment were excluded. If the study was not clear whether the participants had unsuccessful IVF treatment, and not written in English.

The remaining 26 journal articles read in full text, and reference lists was manually searched to recognise any other relevant journal articles not generated by the database search. The process gave rise to further exclusion of seven articles based on not meeting the review inclusion criteria.

The literature search ultimately generated 19 journal articles, which were included in the final literature review. A flow chart summarising the search and data extraction procedure is summarised in Figure 1.

Summary of Papers Reviewed

Out of the 19 papers reviewed, 11 were qualitative, three papers used quantitative and mixed methods respectively, and the remaining one was a case study in nature. The studies employed a range of approaches such as thematic content analysis, narrative analysis and phenomenological approaches. Most of the studies employed a longitudinal design, while a proportion was cross-sectional. All the studies explored women experiences of unsuccessful IVF treatment and a section also included their partners. Across the qualitative studies, information were gathered using qualitative methods, including writing solicited diaries/interviews, in-depth interviews; focus group discussions (FGD), and open-ended survey questionnaires. Only two studies specifically focused the phenomenon of women's experiences of unsuccessful IVF treatment using Heidegger's hermeneutic phenomenology. Sample sizes varied in qualitative research; the lowest being six and the highest being 23 and in quantitative research, a range of 66 to 399 women.

The studies were conducted ranging in different countries including Turkey, Belgium, Australia, Canada, the USA, Sweden, and The Netherlands, Taiwan, China, and the Republic of South Africa.

The literature primarily concentrated on studies relevant to the objectives of the study, which emphasis specifically on studies relating to women's experiences of unsuccessful IVF treatment utilising a systematic method.

The data extraction process focused on broader representation of the IVF treatment experiences, under the following themes:

- In vitro fertilisation (IVF) treatment procedure
- Experiences of IVF treatment which comprise sub-themes of
    - Physical and emotional characteristics of IVF treatment
    - Other themes included - lived experiences of unsuccessful IVF treatment procedures
    - Wholistic and *authentic* care of women undergoing IVF treatment

Some of the discussion also includes direct quotes that add to the understanding of the context described.

In Vitro Fertilisation (IVF) Treatment

In vitro fertilisation (IVF) treatment is one of the most popular and widely used treatment options in assisted reproductive technologies (ART). Increasingly, women and couples who are infertile are turning to ART with the hope of falling pregnant and eventually deliver a healthy baby. (Lundborg, Plug, & Rasmussen, 2017; Mohammed-Durosinlorun et al., 2019; Omokanye et al., 2017).

Whereas IVF treatment is currently the dominant and primary medical intervention to help women, who are infertile fall pregnant and conceive children, it is often considered the last resort of fertility interventions (Lundborg et al., 2017). After one year of having frequent and having sexual intercourse without using any protective measure and exhaustive medical assessment and interventions without falling pregnant, these women are medically diagnosed as infertile and then referred to a fertility clinic or hospital for further assistance (Lundborg et al., 2017).

To unpack the meaning of the research question, it is essential to understand what physical and intrusive procedure are involved in IVF treatment cycle. Couples and or women undergoing IVF treatment exposes themselves to the demanding and taxing medical procedures repeatedly.

In vitro is a Latin word which means fertilisation in glass referring to containers made of glass in particular beakers, test tubes or Petri-dishes (Farquhar & Marjoribanks, 2018; Zegers-Hochschild et al., 2017). In vitro fertilisation (IVF) treatment is indicated when medical conditions prevent the sperm from reaching the egg. The procedure initially developed as a way of providing women whose fallopian tubes are blocked and given them an opportunity to belong to the mother world. However, the treatment has become useful for other couples or women with similar fertility problems especially those with low sperm count, endometriosis, polycystic ovarian syndrome (PCOS), antibodies to sperm, fibroid myomas and unexplained infertility diagnosis. The procedure is also indicated for women who have gone through other procedures for example, intrauterine insemination (IUI); this procedure helps in the fertilisation and were not successful (Boivin & Lancastle, 2010; Bos & van Balen, 2010; Human Fertilisation and Embryology Authority, 2018).

The National Institute for Clinical Excellence (NICE, 2013) guidelines recommend that three cycles of IVF should be offered (under age of 42 years) not fallen pregnant two years of regular sexual intercourse without using protection. The treatment is also indicated for women diagnosed as infertile not fallen pregnant after 12 cycles of artificial insemination (defined as a procedure in which sperm is directly inserted in a woman’s uterus to assist with conception of a child) (National Institute For Clinical Excellence, 2013).

Assisted reproductive technology (ART) treatments involve intricate procedures, and every IVF treatment cycle entails several steps. If one of the steps is not applied correctly and followed strictly, it is highly that the outcome of the treatment and conception may not occur. When women or couples have been physically, psychologically, emotionally and economically prepared the procedure is initiated. Invitro fertilisation (IVF) procedure includes the following steps.

The first stage of the procedure is that the women are placed on hormone replacement therapy to stimulate multiple eggs to develop. Simultaneously other medications are also administered to suppress the endogenous gonadotrophin release natural flow of menstrual cycle and down-regulate the pituitary gland. Then the women are constantly monitored to ensure that follicles are growing (Bhandari, Choudhary, Stewart, & Gynaecologist, 2018).

Controlled ovarian stimulation is the second phase of the IVF procedure. The woman, or her egg donor will be given daily injections, gonadotrophin-releasing hormones and luteinising hormone so that they produce ovaries. The nurses will provide the women explicit instruction as to how to administer the intramuscular injection by themselves at the clinic. Women who are not able to administer the injections by themselves, they must seek assistance from others, such as a qualified nurse in the community. The injections usually last 12-14 days before the eggs are matured for harvesting. At the appropriate level of maturity of the ovarian follicles the women are given Human chorionic gonadotrophin to trigger the eventual ovulation and the pituitary down regulation is also discontinued (Bhandari et al., 2018).

Oocyte retrieval follow the above with the aid of transvaginal ultrasound[1] to guide the pickup of the mature eggs when the women are sedated and, in some cases of male infertility, sperm retrieval. The eggs are harvested in the operating theatre approximately 14 days after the start of the injections.

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[1] Ultrasonography using a vaginal probe, which provides a detailed anatomy of the female pelvis and early accurate identification of foetal structures (Transvaginal ultrasonography, 2017).

The next stage involves the actual in vitro fertilisation or intracytoplasmic sperm injection (ICSI)[2], where ovaries are fertilised with the sperm in laboratory and early embryo growth.

The final stage is the embryo transfer, which is the critical step of the treatment. Embryo transfer involves the gentle placement of the most promising embryos with a particular transfer catheter into the uterus of the woman to establish a successful pregnancy (Boivin & Lancastle, 2010). This is done after the embryos have been cultured in a growth medium over a period of two to six days. To prepare for embryo transfer the process goes through what is termed luteal phase support, whereby drugs are given with appropriate instructions by fertility health professionals. During this process patients are informed and prepared for possible side effects such as ovarian hyper-stimulation syndrome with the assisted reproduction process.

There is then a waiting period where urinary test or serum b-hCG testing is performed post two weeks oocyte retrieval to determine whether implantation of the embryos has occurred and the woman has fallen pregnant. The two weeks waiting period can be very stressful and emotionally taxing. In some cases, there is an embryo cryopreservation. With embryo cryopreservation[3], excess embryos of good quality are frozen and stored for future cycle.

With all these done, there is the possibility of failure given that there may be no viable or suitable human eggs to retrieve and transfer or the successfully transferred embryos may stop maturing or fertility drugs may not work. Excess quality eggs are frozen for future use (Lundborg et al., 2017).

The two weeks waiting period after embryo transfer and waiting to performing pregnancy test to find out if the outcome of the procedure has resulted in pregnancy is particularly described as highly stressful (Boivin & Lancastle, 2010; Lampley, 2010).

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[2] Intracytoplasmic sperm injection: A procedure in which the direct injection of a single sperm is injected into a mature oocyte cytoplasm and is used to enhance the fertilisation phase of IVF treatment (Zegers-Hochschild et al., 2017).

[3] Cryopreservation: Freezing and storage of gametes, zygotes or embryos (Zegers-Hochschild et al., 2017).

A study by Lampley (2010), determined women's experiences during the 14 day waiting after embryo transfer to find out if the implanted embryos has resulted in pregnancy. The study included participants who had received IVF at a fertility clinic located in the Southeast region of the USA. A total of six participants of ages between 25 and 40 years, of which five women identified themselves as Caucasian (non-Hispanic) and one woman who identified herself as both Caucasian and African American. The study utilised van Manen's (1997) six stages of lived experience as method to unravel the experiences of the participants. Their description revealed one overarching essential theme: 'Waiting' during the 10 to 14-day period of learning the results of the pregnancy test (Lampley, 2010, p. 78).

The meaning of the women's experiences in 'Waiting' disclosed eight major sub-themes: '(i) hope; (ii) anxiety; (iii) awareness; (iv) doubt; (v) isolation; (vi) vulnerability; (vii) despair and (vii) anticipation' (Lampley, 2010, pp. 78-79).

The overarching theme of 'Waiting' was found to be apparent in each of the participants' stories which was characterised by an array of emotions and actions as the women moved closer to the day of their pregnancy test result. The first sub-theme, waiting in 'Hope' highlighted that women experienced hope as they became excited and optimistic about the possibility of having a positive pregnancy test to fulfil the desire of belonging to the mother world (Lampley, 2010, p. 78).

The participants shared experiences of 'Waiting in Anxiety' where descriptions of stress, worry, and fear clouded their minds. The women were anxious and uncertain while waiting for unknown pregnancy outcome. These women also described their levels of attachment to their non-implanted embryos following embryo transfer. The women became aware of their embryos, bodies, and time as the day go by (Lampley, 2010, p. 78).

The fourth sub-theme 'Waiting in doubt' was found to be a common feeling during the ten days waiting period as they questioned whether their IVF treatment would be successful. They were uncertain about the treatment outcome whether it would be successful or not and at times expressed self-doubt as they begun to doubt their own degree of commitment to the IVF procedure (Lampley, 2010, p. 79).

The sub-theme of 'Waiting in desperation' emerged as the women experienced the sense of hopelessness. The participants at some period would become desperate when they began to think about the impending pregnancy test result. Several of the women would perform the pregnancy in their homes which was not ideal. Isolation became a common theme in that the participants also felt other family or friends could never fully understand what they were going through emotionally, psychologically or physically during the two weeks waiting period (Lampley, 2010, p. 79).

These women felt a sense of 'Vulnerability' with healthcare workers, family, and friends especially since the pregnancy test result was completely out of their control (Lampley, 2010, p. 79).

Finally, the women waited in 'Anticipation' for the unknown consequence of the pregnancy test and started to imagine the setting in which they will hear their result. The motherless found themselves anticipating their next step in pursuit of motherhood as they prepare for the possible outcome (Lampley, 2010, p. 79).

The author noted that the findings may enhance nurses and other healthcare workers knowledge and the women who experience IVF treatment including the families who support them; thereby improving the level of health care received by women who experience IVF treatment procedure.

The researchers' concluding remarks reflected the aim, finding, and the recommendation of the study. Waiting was strong over-arching themes that emerged from the interviews, and are presumably important concepts in IVF treatment experience. One of the most fearful aspect of ART is the waiting period for a pregnancy result after embryo transfer. This findings supported studies by Durgun-Ozan & Okumus, 2013; Hammarberg, 2003; McCarthy, 2008; Ying etal, 2015, that there is a universal agreement among women in all these studies that the impact of IVF treatment is felt during the wait for pregnancy result. However, the study does not address the IVF treatment journey from the beginning and after the treatment and how it affected quality of life from the women's perspective. Women who go through IVF treatment process frequently report increased levels of physical discomfort and emotional stress throughout the course of treatment (Cousineau & Domar, 2007; Greil, Slauson-Blevins, et al., 2010). Furthermore, each stage of the IVF treatment has been reported to increase the women stress levels. Notwithstanding, the qualitative approach adopted by the researcher was most appropriate since it gave an in-depth understanding of the study. However the author did not specify which phenomenological approach used in the study. Notwithstanding shedding some light on the experiences of women seeking IVF treatment in the interim window this research focuses very closely on just one aspect of IVF treatment, leaving room for further research, which looks at the wider picture of the IVF treatment process from the beginning, during and after treatment.

Experiences of IVF Treatment

Women who are diagnosed as infertile often use IVF treatment to fulfill their wish to have children (Lundborg et al., 2017). Invitro fertilisation (IVF) treatment offers hope to women who are living with infertility, though at the same time the treatment exposes them to invasive procedures that are both expensive and time consuming. The treatment can be physically, emotionally and economically taxing as well as social burdens especially for women as they have to re-organise their daily life to adhere to a strict treatment regimen (Awtani, Mathur, Shah, & Banker, 2017; Cousineau & Domar, 2007; Greil et al., 2011; Greil, Slauson-Blevins, et al., 2010). Women who go through IVF treatment process frequently report increased levels of physical discomfort and emotional stress throughout the course of treatment (Cousineau & Domar, 2007; Greil, Slauson-Blevins, et al., 2010). Again the social stigma of infertility makes it extremely intimidating, or even impossible to get suitable societal support, leaving them feeling alone, tired and frustrated (Johansson et al., 2010; Peterson, 2017; Ying, Wu, & Loke, 2015). Furthermore, each stage of the IVF treatment has been reported to increase the motherless stress levels, and according to researcher's, the physical and emotional experience of IVF treatments creates a fright or flight reaction (Layyous, 2013).

Nonetheless, the many physical stressors of treatment, research suggests that those undergoing treatment describe the psychological rather than physical demands of treatment as the most distressing aspect (Hammarberg, 2003; Hammarberg et al., 2001).

Hammarberg (2003), conducted a follow-up study about women's Lived experiences of assisted reproductive technology (ART) at a large IVF centre in Melbourne, Australia. The study aim was to gain a detailed knowledge about the effect IVF treatment failure had on women emotional well-being after 2-3 years of terminating treatment. A total of (N=211) women who at least had one cycle with oocyte retrieval and embryo transfer and had their last visit with Melbourne IVF clinic participated in the study. The study used mixed methods approach and data was gathered using four-point Likert scale to fill in the degrees of stress and semi structured questionnaire on infertility related problems.

The result of the study revealed some specific aspects of the IVF treatment which the women claimed were mostly challenging. This included: (i) 'making the decision to try ART; (ii) starting treatment; (iii) waiting for results after a scan; (iv) having oocyte collection; (v) the 2 week wait after embryo transfer and (vi) finding out that the treatment was not successful' (Hammarberg, 2003, p. 31). Most women 51% (n=108) stated that the most distressing aspect of the procedure is the two weeks waiting period to find out if the treatment had resulted in pregnancy. The result revealed how the participant's recall the painful and stressful experiences of the IVF treatment even after the treatment was terminated 2-3 years back. This knowledge may be helpful for healthcare professionals who provide IVF services to employ strategies that may help reduce the stressful nature of the treatment thereby enhancing care aspects of IVF treatment.

The adoption of both quantitative and qualitative approaches by the researchers was applicable for the study. This is because, the qualitative method gave in-depth explanations to the figures in the quantitative approach. However the author did not specify the methodology used for the qualitative study and the report did not provide sufficient interpretations of data and qualitative analysis to substantiate the qualitative approach. The research is very relevant, appropriate and useful since the researcher looked into women's experiences of infertility and the problems they had to go through from the different stages of IVF treatment. It is worthy of note that the researcher followed up to check on the women after having terminated treatment in order to find out how the outcome of the IVF treatment affected the recall of the IVF experience. There is little discussion of how women who had babies positively influenced the recall of IVF experience differed from those who remained childless.

The Physical and Emotional Aspects of the Experiences of IVF Treatment

It is reported that IVF treatment is often seen as complex in nature and demanding, and hence the focus of many studies to unearth this phenomenon (Boivin, Griffiths, & Venetis, 2011). In vitro fertilisation treatment presents a stressful and often distressing event a woman may experience in her life; especially when the procedure fails it may leave the women to feel devastated (Cousineau & Domar, 2007).

It is normally stated that women undergoing infertility treatment report symptoms of anxiety, depression, anger and isolation (Cousineau & Domar, 2007). Several studies have reported that undergoing IVF treatment is emotionally and physically stressful particularly for women (Awtani et al., 2017; Cousineau & Domar, 2007; Greil, McQuillan, Johnson, Slauson-Blevins, & Shreffler, 2010; Greil et al., 2011; Verhaak et al., 2006). In addition, IVF treatment is said to be often socially and financially demanding (Awtani et al., 2017; Lundborg et al., 2017; Okwelogu, Azuike, Ikechebelu, & Nnebue, 2012).

Peters (2003) conducted a study on women's perspectives regarding their experience during IVF treatment. The purpose of the study was to explore the lived experiences of women who accessed IVF programmes and who were not successful in achieving a full-term pregnancy, using a hermeneutic phenomenological approach. The study purposely selected six women who were voluntarily recruited from infertilty support groups with the age group ranging from mid 30-40s. Van Manen's (1990) framework of phenomenology was used to guide this research. The transcripts of the of the women's phenomenological conversations were thematically analysed and five major themes were recognised:

(1) 'Keeping Secrets'. The participants attempted to keep their fertility treatment a secret due to cultural and religious implications of being infertile and seeking assisted reproductive treatment. The women also decided to conceal the IVF treatment due to the stima attached to

it, and fear of being the target of gossip due to societal perception of the treatment. This was illustrated in the following statement:

> *'I didn't want to talk about it to everybody, so nobody, even my mother in law didn't know about it most of the time…I was always working and nobody at work knows about it. I never talked to my colleagues about my problem because they didn't understand*' (Peters, 2003, p. 260).

Others also expressed a lack of general understanding associated with accessing IVF treatment. as one woman expressed her feelings:

'*People do not know enough about it and because of that you have lots of people expresses misunderstanding and hurt…'* (Peters, 2003, p. 260).

(2) 'Why Me' was the next theme to emerged as the women were concerned about not being able to bear children on their own as a woman. They expressed anxiety about the fact that they could not reproduce which is a basic thing to do as an adult woman without having to resort to IVF treatment which made them question themselves 'Why me?' (Peters, 2003, p. 261). The participants felt that they have failed the society as having a child is a normal thing to do. For instance, one woman demonstrated this by stating:

> *'You do feel like a failure undergoing IVF treatment because you think everyone else can do it (have children) without having to resort to this... Why can't I just be normal'* (Peters, 2003, p. 261).

(3) The third theme: 'Trying Different Avenues' highlighted that the participants made every effort by trying different strategies so that they succeed. This also made them to lose their perspective on other important facets of their life such as planning for the future, and giving up work as everything was revolving getting pregnant as the women complained that the treatment were all consuming and out of their control (Peters, 2003, p. 261).

(4) 'Getting it wrong': The women espressed their concern that the health professionals were getting it wrong regarding information and communication. The women reported experiencing dissatisfaction from healthcare workers' poor interpersonal and communication skills about unwanted effects of treatment, insensitivity, lack of individualised care, receiving little emotional support and lack of empowerment. The author suggested that the poor

communication portrayed by health care workers may be attributed to a lack of understanding as a result of inadequate education on IVF care (Peters, 2003, p. 262).

(5) 'Being let down': This revealed how the women felt dissapionted when the treatment failed (Peters, 2003, p. 263).

The author's concluding remarks may improve professional practice by raising awareness of the healthcare workers behaviors identified in study. The author recommended that the healthcare professionals especially nurse should continuously appraised their practice in order to aid deliver all-inclusive and individualised sensitive patient care.

Overall, Peter's (2003) findings help to shed some light on the experiences of women pursuing IVF treatment using the philosophy of Heidegger. By exploring the experiences of women experiences of IVF treatment, the author has provided a unique contribution to the IVF care literature. It shows how these women construct their authenticities, and provides insight into the effect that involvement of IVF treatment has on women's quality of life. The results also illustrate how the experience and meaning making are often influenced by traditional, typical societal values and norms regarding infertility and seeking IVF treatment. This study was useful and relevant as the author has indeed given voices of women dissatisfied with IVF care. Notwithstanding Heidegger's philosophical concept was not explained thoroughly and clearly as it pertains to the study. Overall, this study questioned the applicability of Heidegger's philosophical tenets. This calls for further explication of this phenomenon.

McCarthy (2008) also conducted a similar study in Ohio, USA on women's lived experiences of infertility after unsuccessful fertility treatment. The purpose of the study was to explore the phenomenon of women's experiences with infertility after unsuccessful medical intervention. The study was done using a descriptive qualitative study and involved a sample size of 22 participants who were purposively recruited through press releases in the major newspapers of a large Midwestern City. The hermeneutic-phenomenology method designed by Ray (1985, 1991) as a caring approach to nursing inquiry guided this study. The hermeneutic analysis revealed one overarching theme; ‘living an existential paradox: searching for hope in the lost dreams’ (McCarthy, 2008, p. 321). As an illustration, one woman described her IVF treatment journey as:

‘Infertility has sent me on a spiritual journey in search of my lost soul’

The major sub-themes identified included: (i) ‘revisioning self in life’s context; (ii) revisioning the world in life’s context; (iii) experiencing isolation: a sister set apart; (iv) permanent present; (v) choosing to go on and (vi) creating a different kind of life’ (McCarthy, 2008, p. 322).

‘Permanent presence’ was the fourth meta-theme also known as theme clusters in thematic analysis. ‘Permanent presence’ captures the rumbling effect that being diagnosed as infertile has on their lives. Another significant element of this meta-theme is the pain and mourning associated from the loss of a dreamed child. The sadness associated with unsuccessful IVF treatment was coupled with isolation in the grieving process (McCarthy, 2008, p. 322).

The women also described the insensitive care they received from the healthcare professionals whilst they were receiving treatment. They expressed concern about lack of compassionate care received from the IVF care providers and this led to the loneliness they experienced during treatment. The participants reported that they felt abandoned once they leave treatment and were left alone in their grief. Findings of the study showed that the women described the existential challenges to their sense of self, their identity, and the meaning and purpose of life. In McCarthy’s concluding remarks, she acknowledged that, the women who participated in the study described existential crises that needed a life review of themselves while coming to terms of understanding their own lived experience. Finally, the author recommended that, healthcare professionals are advised to assess women’s the overall well-being, including spiritual, psychological as well as emotional, and their social support network even after ending treatment.

McCarthy’s phenomenological study provides rich and in-depth descriptions of essential themes. Not only does McCarthy (2008) study looked at the experiences of infertility after unsuccessful medical intervention, and therefore significance to the current research, as well as clinical relevance for professionals practicing within the IVF care setting. Notwithstanding, the author did not describe in detail the hermeneutic phenomenology method designed by Ray which guided this study. The study did not provide evidence of trustworthiness, limiting the credibility of their research findings.

Similarly, Chin's (2011) dissertation research sought to understand women's experiences following unsuccessful IVF treatment. The purpose of this study was to increase a deeper meaning of the lived experience of Caribbean women who undertook IVF treatment but were not successful. The study used qualitative methodology in the tradition of hermeneutic phenomenology. A purposeful sampling method was utilised to select 12 women who have failed at least one IVF treatment in the last three years, prior to the commencement of the study. The data was analysed by van Manen's (1990) six steps approach to uncover the participant's experiences of IVF failure. The data revealed four main themes which are: (i) disintegrating; (ii) disheartening; (iii) perpetuating and (iv) guarding (Chin, 2011). The research study gives insight into the depth of the challenges confronted by these Caribbean women specifically the multiple losses that were imposed by infertility and treatment. The study also revealed a substantial findings where the women in the study were compelled to search for the meaning to make sense of their lives.

These results highlight the dynamic nature of infertility and undergoing IVF treatment in pursuit of motherhood, and the ways in which women living with infertility process the complex and intrusive ARTs experience. In addition, Chin (2011) provides an understanding of the challenges confronted by these Caribbean women specifically the multiple losses that were imposed by infertility and treatment. However, it is very crucial to always consider the context in which the research is carried out. Given that Peters (2003) and Chin (2011) investigated the experiences of women living with infertility utilising Heidegger's philosophical tenets in other countries (South Australia and Caribbean, respectively), it is unclear whether these findings can be generalised to IVF treatment in the Ghanaian context.

It may be the case that different policy and practice in these countries alter the way in which women undergoing IVF treatment construct their experiences, and that the larger societal and cultural context plays a part in these phenomenon. It is therefore imperative to explore this phenomenon in Ghanaian context to understand the effect that undergoing IVF treatment has on Ghanaian women quality of life. Again applying Heidegger’s hermeneutic phenomenology to Ghanaian women’s unsuccessful IVF treatment may provide a greater understanding as to whether similar experiences are shared by this vulnerable population regardless of policy, process and cultural diversity.

Mosalanejad, Parandavar, Gholami, and Abdollahifard (2014) conducted a phenomenological study to investigate the lived experiences of Iranian women with failure in infertility treatment. The purpose of this study was to explore the increasing and decreasing factors of hope in women with unsuccessful infertility treatment. Using a Husserlian phenomenological approach, 23 women who had experienced infertility failure were selected. The data was collected through semi-structured interviews and analysed by Colaizzi (1978) seven-step inductive method.

The first main theme identified comprises increasing factors: ‘(i) spiritual resources; (ii) family interaction and support and (iii) information through the media. The second identified main themes contains decreasing factors: (iv) nature of treatments and (v) negatively oriented mind’(Mosalanejad et al., 2014, p. 119).The author’s suggested that there is a need to improve information and communication aspects of care by the IVF healthcare professionals. Again, they also suggested improvement in medical skills as well as informing them as to when to end or discontinue IVF treatment. Recommendations made to improve the care of IVF treatments included respect, coordination, staff support, accessibility, partner involvement, better communication and information sharing and a good attitude of and therapeutic relationship with the staff at the fertility clinic.

In another study, Ying et al. (2015) researched the experiences of Chinese couples pursuing IVF treatment. The main objective of this qualitative inquiry was to investigate Chinese couple’s experiences with IVF treatment; specifically, the couple’s perceptions and support of the process. The study selected 12 couples who were infertile and have undergone at least one cycle of IVF treatment in the past 12 months prior to the study. A convenience sampling method was used in recruiting participants from a reproductive medical centre at a university hospital in the city of Hangzhou, China. The data was analysed using conventional content analysis to describe the phenomenon under investigation. The four major themes that were identified from the analysis of the transcripts were: ‘(i) the process of hardship; (ii) the endurance of hardship with a loving relationship; (iii) partnership in couples and (iv) ambivalence towards social support (Ying et al., 2015, p. 4)’.

The findings revealed that, the couples suffered from the physical and emotional pain during the treatment and described how it affected their relationship. The couples felt that sharing their feelings and supporting each other contributed to emotional well-being and improved the marital relationship. The results of this study suggested that psychosocial support from healthcare providers is needed and should be provided to couples together, as dyads undergoing IVF treatment. In the researcher’s concluding remarks, they emphasised that the findings offer clear understanding into the distresses IVF couples face that necessitate a supportive program for women and couples who are seeking IVF treatment. They recommended that there is a need for policy makers to incorporate interventions that may enhance marital relationships of couples into infertility treatment.

The Lived Experiences of Unsuccessful IVF Treatment

It has been reported that, the experience of infertility and the failure of infertility treatment can have a long lasting psychological effect on women and their partners (Boden & Boden, 2007; Filetto & Makuch, 2005; Johansson & Berg, 2005; Volgsten, Svanberg, & Olsson, 2010a). The development of ARTs such as IVF/ET treatment have given hope to women and couples to fulfil their wish of becoming parents. However, there is a possibility that IVF can result in failure, when this happens the women often become disappointed and grief the loss of a dream child. Sometimes it becomes very difficult for the women to manage and cope with the distressing and stressful life experience (Lee et al., 2010). Authors use a variety of terms such as, disappointment, discouragement, loss of hope, self-blame, guilt feelings, anger, regret, and feelings of sadness to describe the grief and depression following unsuccessful IVF treatment. Individuals and couples often shed tears in response to these emotional suffering either in secret and or with family members when treatment fails (Harris & Daniluk, 2009; Lee et al., 2010; Lukse & Vacc, 1999; Verhaak, Smeenk, Van Minnen, et al., 2005; Volgsten et al., 2010a).

Lukse and Vacc (1999) identified the levels of grief and depression and the coping mechanisms of women with infertility problems who sought IVF treatment. The study consisted of two groups of women seeking treatment at two IVF centres in the south-eastern USA. One group involved 50 women undergoing IVF treatment, and the other group which consisted of 50 women receiving ovulation-induction treatment.

The findings revealed that the particpants in both groups experienced higher levels of grief and depression before, during, and after the IVF treatment. There were higher scores found on the Grief Experience Inventory (GEI) for both groups of women after the failed treatment. In addition, it was shown that, characteristics such as the women's age, reproductive problems, years of being infertile, financial problems, and number of past IVF cycles was not found to influence the levels of depression. The two groups of the women in the IVF treatment used isolation coping behaviours such as self-talk and sleep to overcome their distress.

The authors concluded that therapeutic counselling may be more effective if initiated before the infertility treatment. They also recommended that before commencing infertility treatment, women levels of distress and coping strategies should be assessed first. This may afford the women with opportunities to learn and practice new adaptive behaviours that could enhance their ability to cope with the negative outcome of infertility treatment.

The usage of these two (2) groups thus the women undergoing IVF treatment, and the other group receiving ovulation-induction treatment for the study was of much importance since it gave a clear variation of which of the groups suffered intense grief and depression and the coping mechanisms used by each group. The research methodology was explained thoroughly and clearly as it pertains to the study and the concluding remarks also resonate with the research objectives. Notwithstanding, the quantitative data is unable to give clear examples of actual experiences, and is limited in the interpretation and further understanding of the phenomenon.

Lukse and Vacc study (1999), is important and useful to be considered within the body of this literature review, as it widely examined the woman's emotional well-being, before, during and after treatment. This study demonstrates the need for further study in the current IVF care setting. I believe such a study could fill in the gaps of my understanding of this process. This study was limited, as the voices of women dissatisfied with care were not heard. The findings could be more interesting if insights could be gained through qualitative study. It is crucial that an understanding of IVF treatment processes, and the major stressors underlying the lived experience of unsuccessful IVF treatment may be comprehended using Heidegger's interpretive phenomenology and offering women the opportunity to tell their stories.

A study by Johansson and Berg (2005), examining women's experiences of childlessness two years post IVF treatment demonstrated that the essence of the women's experiences two years after the end of the treatment is life-grief which was found among the participants studied. Purposive sampling method was used to recruit eight women who received infertility treatment at the Sahlgrenska University Hospital, Göteborg, Sweden. The study used Giorgi's, phenomenological method of philosophy to analyse the result (Giorgi, 1997; Giorgi, 2000).

The women's description revealed one essential theme: 'life-grief' and five main themes were uncovered: '(i) childlessness is a central issue in life; (ii) IVF is a positive and important part of life; (iii) contact with other people is not an important issue; (iv) the hope of achieving pregnancy still exists and (v) attempts to identify other central issues in life' (Johansson & Berg, 2005, p. 60). The result of this study offers a deeper understanding and needs of women's experiences of infertility two years post IVF treatment. In addition, the study may also increase our knowledge about how grief, is expressed at a deeper level in the life world of women after failed IVF treatment. The authors concluded that the study findings present a challenge to healthcare professionals involved in the care of women with infertility in developing caring interventions to cope with unsuccessful IVF treatment. However, the author offer little discussion on trustworthiness of the study.

These results suggest that women with fertility related problems go through painful and stressful experience of IVF treatment, and are vulnerable of being seen as not able to have children. The essence of the women's experience two years after the end of the treatment is described as life grief. However, the research focuses solely on women's experiences two years after the end of IVF treatment, and therefore the question could be asked, are these emotional responses also experienced by women who persist until they succeed?

In another related study, Harris and Daniluk (2009), conducted a phenomenological study to determine the effect of pregnancy loss for women who are infertile following conception through ART. The purpose of this qualitative study was to explore the subjective experiences of women who conceived using ART, only to lose their pregnancy at two –16 weeks gestation. A total of ten women were recruited through a privately-operated Canadian infertility clinic.

The results identified nine main themes. These were: '(i) a sense of profound loss and grief; (ii) diminished control; (iii) a sense of shared loss with their partners; (iv) injustice or lack of fairness; (v) ongoing reminders of the loss; (vi) social awkwardness; (vii) fear of re-investing in the treatment process or a subsequent pregnancy; (viii) the need to make sense of their experience and (ix) feelings of personal responsibility for what had happened' (Harris & Daniluk, 2009, pp. 716-717). The women after losing the pregnancy, were disappointed and stated they were markedly uncertain toward future reproductive options and were not sure if they would attempt another treatment again. In concluding the study, the author's stated that there is a need to have an existing plan of action in place throughout the treatment process and even following early pregnancy loss to help relief emotional and psychosocial disturbances.

It is interesting that a number of themes seem to complement the findings of other studies, thus suggesting that when IVF treatment is not successful, participants may experience in similar ways of grieving their hoped for their dreamed child, and these experiences may be multi-ethnic. For instance, as with Johansson and Berk (2005) demonstrated that the essence of the women's experiences two years after the end of the treatment is life-grief which was found among the participants studied. The findings of Lukse and Vacc (1999) revealed that the particpants in their study experienced higher levels of grief and depression before, during, and after the IVF treatment even though the studies used different research approach and inquiry. These researchers certainly demonstrate commonalities within their findings.

Lee et al. (2010) determined grief reactions among women who are infertile following unsuccessful IVF treatment and the coping methods used. The purpose of this study was to identify the relationship between emotional responses to grief and the coping strategies applied to resolve the problem. A cross-sectional descriptive was used as the study method. The sample population were 66 women who at least had one IVF treatment failure in a fertility centre in central Taiwan. The data collection method used were a structured questionnaire administered personally by the authors which includes; (i) Grief responses questionnaire adapted from the Kübler-Ross's five stages of grief (Kübler-Ross, 1969) and (ii) the Jalowiec's coping scale (Jalowiec, Murphy, & Powers, 1984; Jalowiec & Powers, 1981)adopted from Folkman, Lazarus, Pimley, and Novacek (1987), to assess the grief responses and coping strategies following unsuccessful IVF treatment. The data were analysed by means of descriptive statistics (mean and percentage distribution) and inferential statistics (Pearson's correlation) using Statistical Package of Social Sciences; SPSS 12.0.

The findings of the study revealed that the highest occurring responses to grief among the women were; ' (i) bargaining; (ii) acceptance (iii) depression; (iv) anger and (v) denial and isolation' (Lee et al., 2010, p. 509). The order of coping strategies used, from the highest-to-lowest, after IVF treatment failure were: '(i) confrontative (ii) optimistic; (iii) self-reliant; (iv) fatalistic; (v) supportive; (vi) evasive; (vii) palliative and (viii) emotive coping strategies' (Lee et al., 2010, p. 509). It was evident from the findings that the participants are more likely to use problem-focused than emotion-focused coping strategies to deal with psychosocial distresses. All coping measures were also correlated with grief responses and based on the association the findings showed that most of the coping measure were congruous with the associated women grief responses. The author's concluded that, the result of the study may assist nurses and other healthcare professionals with knowledge of possible existence of responses to grief after failed treatment to improve IVF care. The findings could be more interesting if insights could be gained through qualitative study.

In a related study, Volgsten, Svanberg, and Olsson (2010b) conducted a research entitled unresolved grief among couples who pursue post three years unsuccessful IVF treatment in Sweden. The study objective was to explore the experience of undergoing unsuccessful IVF treatment and of remaining childless 3 years after IVF treatment in both women and men. The study used qualitative study design to sample ten women and nine men who had attended fertility treatment at the centre of reproduction, University Hospital, Uppsala, in Sweden. Data was collected using semi-structured interviews and was analysed by means of qualitative content analysis (Graneheim & Lundman, 2004).

The analysis resulted in two main themes and seven sub-themes describing the participant's lived experiences. (1) The first main them identified relate to unsuccessful IVF treatment experiences with four main sub-themes. These are: '(i) putting up a shield; (ii) late realisation of the need of professional support; (iii) affected partner relationship and (iv) frustrated at the ending of IVF. (2) The second main theme is also in connection with experiences of remaining childless after IVF failure and the three main sub-themes identified include the following: (v) unanswered questions after ending IVF and feeling excluded; (vi) lacking understanding and (vii) loss of future life goals page' (Volgsten et al., 2010b, p. 1292). The results showed that, three years post IVF treatment, several of the participants were still grieving their loss and had still not come to terms of remaining childless, which indicate that the grieving process was not resolved. Again, the findings revealed that the men did not express grief but rather, they supported and helped their partners adapt to the loss.

Concluding their study, the authors stated categorically that the grieving process of unsuccessful IVF treatment still remain among the participants even after three years of terminating treatment. Unresolved grief was the main experience three years post unsuccessful IVF treatment. The author's recommendation was that provision of additional individual support and counselling during IVF treatment may help resolved grieving early as each individual may not experience childlessness and grief in the same way.

This research is useful and relevant in that the findings gives insight into emotional responses to grief among the women studied, and begins to shed light on how several of the participants were still grieving their loss and had still not come to terms of remaining childless, which indicate that the grieving process was not resolved. The author included both men and women in their sample and the grieving process was compared among both the women and the men. The qualitative approach was useful but the investigator should have provided little evidence of self-reflexivity as the interviewer was known to some participants this could possibly influence the outcome of the study.

The Wholistic Care of Women Undergoing IVF Treatment

The wholistic approach takes into consideration an individual's psychological, sociological and mental views and needs that may be important during medical intervention treats each individual as a unique entity (Papathanasiou, Sklavou, & Kourkouta, 2013, p. 1). Wholistic care places emphasis on answering patients' questions, and allays patient fears and concerns (Papathanasiou et al., 2013). As nurses play a pivotal role in fertility treatment, it is essential that they take assertive part in promoting wholistic medical care approach so that women receiving treatment may be protected from unnecessary emotional distress.

It is reported that, IVF treatment often involve extensive and intrusive treatments which is associated with the high treatments cost which often result in high drop-out rates (Verberg et al., 2008). To this, women and couples seeking fertility treatment may expect high-quality, safe and authentic care, which is also patient focused (Dancet et al., 2010; van Empel et al., 2010). Providing wholistic and authentic care for this vulnerable women can assist healthcare professionals in this field to improve quality of life and thereby improving emotional comfort (Durgun-Ozan, 2015; Durgun-Ozan & Okumuş, 2017; Verhaak et al., 2006).

Research has indicated that women and couples seeking IVF treatment reported experiencing dissatisfaction from healthcare professionals (Dancet et al., 2011; Pedro & Faroa, 2017; Peters, 2003; Ying et al., 2015). In this circumstances, providing wholistic nursing care focusing on keen problems exclusive to each of the women's preferences, may be valuable and crucial to improve quality of life (Dancet et al., 2011; Durgun-Ozan & Okumuş, 2017; Fawcett, 2005).

van Empel et al. (2009) conducted a study in Dutch fertility clinic, to investigate potential strengths weaknesses and needs in patient pursuing fertility care. The purposes of this study were to: ‘(i) identify different aspects of fertility care relevant to patients; and (ii) investigate whether patients regard these aspects as weaknesses, strengths or needs in a fertility care’ (van Empel et al., 2009, p. 146). The study used mixed methods to identify the phenomenon being investigated. The participants were recruited from four fertility treatment centres in the Eastern part of The Netherlands.

The study was carried out in two main phases. In phase one of the study the authors conducted a focus group study using 21 couples who are infertile by detailing aspects of fertility care which the participant described are relevant and or important to them. The findings of the focus groups discussions were used to design a patient questionnaire about experiences and needs in fertility care. The second phase was a survey with the questionnaire adopted from qualitative results from the first phase, to investigate which of these care aspects were regarded as strengths, weaknesses and needs in current fertility care. Descriptive statistics were used to determine the quantity of the weaknesses, strengths and needs in the quantitative method. A total of (N=369) couples was selected to complete the questionnaire. The result indicated that the patients experienced many weaknesses in fertility care, mostly regarding emotional support and continuity of care.

The result also revealed that, respect, autonomy and partner involvement were considered strengths in the study. In addition, the women expressed their need for more continuity from their doctors during their treatment, and couples strongly desired to have free access to their own medical records. The author’s conclusions from this research was that, couples who are infertile experience strengths, and many weaknesses as well as greater needs during their fertility treatment. The researchers recommended that there is the need to improve the patient centeredness aspect of care as the couples expressed they lacked patient focused kind of care in their daily involvement in the infertility care. This will go a long way to stay true and comport themselves in the programme.

The author’s adopted an appropriate methodology to facilitate a solution to the research question and applied to each phase of the data collection. The research methodology was explained thoroughly and clearly as it pertains to the study objectives. The research methods was discussed logically and in-depth pertaining to the population, sample, information gathering process and analysis.

Dancet et al. (2011), conducted a study on patient-centred fertility care for patients who have fertility problems from two European countries. The study was qualitative inquiry aimed at providing deatailed understanding into patient’s perspective on fertility care. Information was collected using focus group discussions with patients (N=103) to determine patients’ positive and negative experiences with infertility care. The data was analyed by means of qualitative content analysis and the results revealed ten detailed dimensions of patient centredness, which can be divided further into ‘(1) Six system and (2) Four human factors’ (Dancet et al., 2011, p. 229).

The system factors, in order of patient’s priority, are: ‘(i) provision of information; (ii) competence of clinic and staff; (iii) coordination and integration; (iv) accessibility; (v) continuity and transition; and (vi) physical comfort’ (Dancet et al., 2011, pp. 229-231).

The human factors, in order of patient’s priority and importance are: ‘(i) attitude of and relationship with staff; (ii) communication; (iii) patient involvement and privacy and (v) emotional support’ (Dancet et al., 2011, pp. 229-231).

This study provided a detailed description on patient’s perspective on individualised infertility careas the authors explicitly defined what constitute systemic and human factors of patient care. The development of an interaction model also aided an understanding of the complex concept of patient centred care. The authors recommended that fertility clinics may consider the detailed description of the dimensions of patient-centredness revealed by the study so as tailored care specific to patients need. They also suggested that the clinics could be attentive to both system and human dimensions of patient centredness when considering what is best for the patient. The study is useful as findings provides a practical guidelines for IVF carers.

In a recent study, Pedro and Faroa (2017) researched into to the lived experiences of fertility treatment and care by South African women diagnosed with infertility problems. This study was a qualitative in nature and sought to explore the fertility treatment experiences of South African women with involuntary childlessness from suspected infertility. The women were sampled utilising snowball techniques. A total of 21 women from different age and ethnic groups were interviewed for the study. The data were analysed using thematic analysis which identified four main themes: (i) lack of compassionate care from treatment healthcare providers; '(ii) the need for infertility clinics to integrate psychosocial support care; (iii) a need for continuing education for fertility staff and (iv) financial support resourcing' (Pedro & Faroa, 2017, p. 268).

The findings revealed that, the participants expressed a need for healthcare staff at the fertility clinics to be more attentive to their emotional and psychological needs as a result of the distressing nature of the treatment process. The women also felt that some healthcare staff lacked technical knowledge about the fertility treatments and this left them deprived of crucial information. The costly nature of fertility treatment presented as an added burden for the participants. This makes it difficult to access for those who do not have the financial means to access infertility services. The authors pointed out that, in order to provide greater access to fertility treatment as well as mental health services, more attempts would have to be made to make services less costly or even free, where needed. In their concluding remarks the author's suggested that, participants seemed to require a more individualised and patient centred form of fertility care.

To sum up, the three researchers selected the most appropriate approach based on their worldviews and the research objectives. Wheras van Empel (2009) sought to investigate potential strengths, weaknesses and needs in patient pursuing fertility care. Dancet etal, (2011) sought to sorely understand inquiry aimed at providing deatailed understanding into patient's perspective on fertility care. In Pedro and Faroa's (2017) study, the authors sought to understand the lived experiences South African women seeking fertilty care. Overall both studies revealed that participants seemed to require a more individualised and patient centered form of fertility care tailored to their specific needs. The varous themes described by both authors were appropriate and adequate. In both studies the primary aim was to appreciate the wholistic aspect of participants experiences of IVF care and the meaning ascribed to this experience.

Watson's (2008) **"*Theory of Human Caring*"** is widely used in nursing practice. The Theory of Human Caring was informed by Jean Watson's interest to have insight of the meaning of human life and their existence (Watson, 2008). The theory emphasis that the essence of nursing practice is to provide safety and quality care in a serene environment for their patient to recover quickly.

Watson proposed the carative factors that progresses onto carative processes where the professional nurses could use as a guide to create the best environment for patient recovery.

Carative Factors	Caritas Processes
1. Humanistic-altruistic value systems	Practicing loving-kindness/compassion and composure for self/other
2. Enabling faith-hope	Being authentically present; enabling belief system and subjective world of self/other
3. Cultivation of sensitivity to self and others	Cultivating own spiritual practices; beyond ego-self to authentic transpersonal presence
4. Helping-trusting, human relationship and care	Sustaining a trusting, loving, trusting and caring relationship
5. Expression of positive and negative feelings	Allowing for expression of feelings; authentically listening and "holding another person's story for them
6. Creative problem-solving and decision making caring process	Creatively solution seeking through caring process full use of self; all ways of knowing/doing/being.
7. Transpersonal teaching learning	Authentic teaching-learning within context of caring relationship; shift toward a health-healing wellness coaching model and stay within other's frame of reference;
8. Supportive, protective, and/or corrective mental, social, spiritual environment	Creating healing environment at all levels; subtle environment, physical, nonphysical, subtle environment of energy and consciousness, wholeness, beauty, peace and dignity are potentiated
9. Human needs assistance	Reverentially and respectfully assisting with basic needs, holding an intentional, caring consciousness of touching the embodied spirit of another as sacred practice, working with life force/life energy/life mystery of another
10. Existential-phenomenological-spiritual forces	Opening and attending to unknown, spiritual, mysterious, and existential dimensions of all the vicissitudes of life change; "allowing for miracle." All of this is presupposed by a knowledge base and clinical competence

Table 2: 'Ten Carative Factors and Caritas Processes' (Watson, 2007, pp. 131-132).

Durgun-Ozan (2015) undertook a case study to assess and evaluate the care of a woman first attempt of unsuccessful IVF treatment utilising Watson's ***Theory of Human Caring***. The focus of the case study was to psychologically prepare a woman who is diagnosed as infertile to accept an outcome of a negative pregnancy result and see how best to assist her try another cycle in due time. The case study objectives were to explore a theory-based approach to provide wholistic care of woman with unsuccessful IVF treatment and evaluate the outcome of the care. Further, the author's aimed was to establish if the Watson's ***"Theory of Human Caring***" may be effective in assisting women to cope with tedious unsuccessful IVF treatments. The woman used for this study was, randomly selected from the group of individuals receiving care at IVF medical centre in the Southern part of Turkey.

The main findings in Durgun Ozan, case study was that there was continuous engagement of interaction with the patient, and the nurse being *authentically* present throughout the IVF treatment process with the participant improved effective coping. The author described how integration of the ideas and values of Watson's ***"Theory of Human Caring"*** into IVF care treatment yielded significant improvement. They indicated that, this case study suggest that utilising Watson's ***"Theory of Human Caring"*** could be suitable for IVF nurses in providing better nursing care and caring relationship. Applying the theory's (carative factor #6,) which is creative problem-solving method for decision making and the corresponding carative process, to this case study was considered necessary as it helped the patient to regained hope and moved on. This also helped to make a better analysis of nurses' attitude and practice towards caring for women undergoing IVF treatment and determined whether the Watson's theoretical model is reflected in their actions and judgment.

Women and couples who are infertile start the IVF treatment with the possibility of achieving a positive pregnancy outcome, by going through such a challenging experience. This hope may sometimes not come true as such, women need a sustained supportive wholistic nursing care that builds on a trusting and helping human care relationship.

A recent randomised study by Durgun-Ozan and Okumuş (2017), reported that nursing care based on Watson's ***"Theory of Human Caring"*** may be helpful in lessening suffering, and negative effect associated with infertility treatment. The objective of this study was to evaluate the efficacy of the Watson's "***Theory of Human Caring"*** on nursing care programmes. A total of 86 women who received IVF treatment from IVF clinic in Turkey were selected to partake in the study. The study method used was randomized controlled trial, made up of intervention group; (n=45), and control group; (n=41).

The data collection method were; Spiel Berger's-State Trait Anxiety Inventory (Spielberger, 2010); Infertility Distress Scale developed by Akyüz and Gurhan (2008), and Ways of Coping Questionnaire (Folkman et al., 1987). The data were analysed using the Statistical Package for Social Sciences (SPSS for Windows 15.0). The results revealed that a significant difference were found in both dimensions of groups regarding the levels of anxiety, distress, and coping methods. The authors concluded that Watson's theory may be recommended to be used to guide nursing practice in IVF care as the current study revealed that the theory applied on nursing care proved valuable on women's emotional state and increased positive coping style.

In another related phenomenological study, Boz and Okumus (2017) explored the experiences of Turkish women who are infertile and seeking fertility care using solicited diaries to reveal the IVF treatment experience. The study drew on Watson's ***"Theory of Human Caring"*** to describe and interpret the positive and negative infertility experiences of women. A purposeful sample was utilised to select 18 women who were diagnosed with primary infertility from one infertility Turkey IVF centre.

The findings of the study recognised the following major themes: '(i) losing control of everything; (ii) facing up to the angst; (iii) living with the unknown; (iv) alienation from the fertile world; (v) existential faith and hope and (vi) nonhealing environment' (Boz & Okumus, 2017, pp. 270-271). The results revealed that participants were concerned about their care needs as a part of existence and not as an object.

In conclusion, the authors suggested that there is a need to sensitise healthcare professionals to the importance of providing effective care to reduce the *angst* of treatment. Boz and Okumus recommended that healthcare practitioners especially, nurses should help infertile women and couples to reorganise what it the means to be infertile and receiving infertility treatment.

This findings is consistence with a report by Durgun-Ozan (2015) where the author described how integration of the ideas and values of Watson's ***"Theory of Human Caring"*** into IVF care treatment yielded significant improvement. The data collection method and analysis were appropriate and provided detailed information however, the authors did not explicitly specify and explain vividly which philosophical tenets used for the study. The researchers also did not detailed in their findings what constituted the negative and positive infertility experience to reflect the research aim and objective.

Chan et al. (2012), carry out quantitative study on spiritual care of women undergoing IVF treatment in Hong Kong, China. The study sought to integrate spirituality in psychosocial group intervention to improve the spiritual wellbeing of women seeking IVF treatment utilising Body-Mind-Spirit integrative (I-BMS) intervention. The researcher's conducted the study on three hundred and thirty-nine (N=339) women receiving IVF treatment. The study had two groups of participants who were randomly assigned: (i) an intervention group (where the women received standard IVF treatment and attended four additional sessions of the psychosocial and spiritual well-being intervention; n=172) and (ii) a control group (where the women received standard IVF treatment only; n=167). The women were taught relaxation techniques and skills such as guided imagery, prayer and meditation in the I-BMS intervention. They were also given training on mindfulness therapy in response to the stressful experience rising from the IVF treatment.

The findings revealed that after the spiritual intervention, participants reported a reduction in physical distress of the procedure. Again the participants stated that the intervention has helped in decreasing the level of anxiety and improved their marital relationships. They have grown to be more spiritual, and feel less confused and more relaxing. The researcher's concluded that the findings support a more wholistic approach of IVF care and people with similar medical conditions.

Particularly, by including spiritual care into existing mind–body therapies, the needs and wishes of women seeking IVF treatment are well taken care of.

This research is found to be relevant and appropriate to the current study since much work has not been done on spiritual care of women undergoing IVF treatment. The researchers also did a detailed work on incorporating spirituality into psychosocial interventions utilising Body Mind-Spirit integrative (I-BMS) intervention. These findings highlight that after the spiritual intervention, participants reported a reduction in physical distress of the procedure, and clearly have implications for professional practice. A gap still remains though as the authors did not state which stage of the IVF treatment need the intervention most. Utilising a mixed method for the study would have been suitable instead of using only quantitative method to analyse the study, since qualitative study would provide in-depth understanding of the spiritual aspects of care and bring out more detailed information rich material to enhance the study outcome. More interesting findings could be yielded if there was a follow-up upon completion of treatment and knowing the treatment outcome.

Gaps in the literature Reviewed

The literature review highlights that previous research has explored the experiences of women or couples seeking infertility treatment. However, an exploration of this phenomenon as a complete experience has not yet been conducted in Ghana, and in this sense women's experience of unsuccessful IVF treatment is missing from the Ghanaian literature.

The literature search identified that most studies were retrospective in nature, describing the experiences two to five years after terminating the procedure. In most instances potential recall bias was also identified by the authors. The search also revealed that only few studies focused on exploring the experiences of IVF treatment shortly after the treatment has failed.

Only two studies identified in the literature review focused specifically on the experiences of women's unsuccessful IVF treatment utilising Heidegger's hermeneutic phenomenological approach (Peters, 2003; Chin, 2011), but did not explicitly applied the concept of Heidegger in the study results.

There were also no studies in Africa that paid specific attention on the experiences of women with unsuccessful IVF treatment. By contrast, scholars have focus mainly on the psychological and sociocultural aspects of the infertility experience. In Ghana all the current individual studies mainly concentrated on specific aspects of women or couples experience on infertility treatment in general not specific to the IVF treatment experience using a qualitative research design. Through the literature search no study have been found in Ghana that were specific to investigating the lived experiences of women following unsuccessful IVF treatment using Heideggerian hermeneutic phenomenology in the Ghanaian context.

While the broader literature discussed gives insight on the complexity of the infertility treatment, contributing to understanding in this area that appear to be important, given the limited prominence of the voice of women living with infertility problems and seeking IVF treatment, it is unclear which aspects of the IVF treatment schedule women experience specifically and uniquely.

This study therefore seeks to expand on the findings of the nursing literature, particularly those pertaining specifically to the experiences of Ghanaian women's unsuccessful IVF treatment. This study sought to provide a richer, up-to-date understanding of the phenomenon under investigation, and how the motherless lived and experienced the IVF treatment journey.

Summary

In this chapter, IVF treatment experience as a phenomenon has been explored. As this review shows, a large body of literature has investigating aspects of the infertility treatment experience using different methodologies. Assisted reproductive technology (ART), which is generally IVF, has clearly been shown to be the major treatment for infertility within the biomedical model.

There is general consensus that a review of the literature suggests that women start the IVF treatment with high hopes of achieving success, and subsequently enter motherhood become mothers that over time, health professionals might contribute to a sense of 'false hope' that treatment will eventually be successful. There seems to be consensus across the literature that one of the most central experiences of IVF treatment is the interim window where the women should wait two weeks after the embryo transfer to find out if implantation has taken place.

Similarities are noted in all the qualitative studies in the literature reviewed. All authors provided insight regarding the ambivalence experienced by women about the IVF treatment process, and the hoped for a dreamed child. All authors reiterate the need for individualized support and patient centered care for women as they go through this stressful process.

Notwithstanding the fact that physical, psychological and emotional implications of infertility treatment are documented in many studies in different countries especially in the developed countries, comparatively, no research has been conducted in Africa in this area.

This study aims to fill this gap in literature and contribute to the theoretical understanding of the process involved in IVF treatment. Developing insight into the experiences of women receiving IVF care may be helpful for healthcare providers to offer wholistic care and improved patient-centredness. It is therefore hoped that the study findings may be helpful in developing highly indigenous, culturally relevant practical intervention guidelines and models to guide effective nursing practices.

The chapter which follows explains the philosophical underpinnings of the thesis. It also describes in detailed the research methods employed and how expression of rigour in the interpretive phenomenology has been explained.

CHAPTER THREE

The Philosophical Underpinning of the Study

Introduction

Phenomenology as an inquiry has become a prominent philosophical system that guides generation of information in social, human, and natural sciences. This inquiry offers an approach for nursing scholars to research the complex world of human experience and unearth aspects of these experiences of health and illness which enhances nursing practice (Cohen, Kahn, & Steeves, 2000; Norlyk & Harder, 2010; Willis, Sullivan-Bolyai, Knafl, & Cohen, 2016).

The goal of phenomenology is to maximise the depth of knowledge of the meaning of human phenomena as it is lived (Flood, 2010; Heidegger, 1996; Todres & Wheeler, 2001). Phenomenological researcher explore the lived experiences of the participants with the aim to understand and reveal the meaning of the phenomenon being studied (Dowling & Cooney, 2012).

This study engaged with the philosophy of Heidegger's hermeneutic phenomenology to investigate explore and interpret the lived experiences of women's unsuccessful IVF treatment. Hermeneutic phenomenology is considered a philosophical discipline and a research method used for describing human experience of human in relation to a person's historical, cultural and social world (Flood, 2010; Lopez & Willis, 2004).

The Concept of Phenomenology as a Philosophy

Heidegger's early philosophy was profoundly shaped by the phenomenological works of Husserl. The philosophy of Heidegger's phenomenology is essentially an interpretive process (Mulhall, 2013). Heidegger's stance of interpretive hermeneutic phenomenology acknowledges that the researcher's and participant's worldviews are intertwined. This relationship of the researcher and self enables the interpretive process of the phenomenon and lived experience which is being investigated (Cohen et al., 2000; Dowling, 2007). A hermeneutic inquiry, in the tradition of Heidegger's philosophy, aims to illuminate the subjective meaning of an unfolding phenomenon through interpretation. In particular, Heidegger's hermeneutic phenomenology is ontological, and this philosophical concept concerns the *meaning* of *being* rather than knowing. To comprehend the *meaning* of what Heidegger termed human *existence (Existenze) in-the-world,* one has to appreciate 'Heidegger's philosophical argument that the philosophical institutions have ignored the real nature of the universe and human *existence (Dasein) in-the- world*' as captured by (Dreyfus & Wrathall, 2008, p. 3).

Schools of Phenomenology as a Philosophy

Traditionally, there are two main schools or domains of phenomenological philosophies used in nursing research. Whilst a number of phenomenological philosophers (Gadamer, 1975/1982/1987; Giorgi (1975); Merleau-Ponty, 1947/1962) have advanced and developed phenomenology, the main concepts are predominantly from the theories of Edmund Husserl (1859-1938) and Martin Heidegger, (1889-1976) (Dowling & Cooney, 2012; Willis et al., 2016). The main Heideggerian concepts underpinning this study included *lived-world, Dasein*, *being-in-the-world*, modes of *existence* (*Existenze*) and the participants' care structure (*Sorge*).

Husserlian Descriptive Phenomenology

As stated by LeVasseur, Lopez and Willis, Edmund Husserl, a philosopher and German mathematician is credited to have founded phenomenology (LeVasseur, 2003; Lopez & Willis, 2004). The basic tenets of Husserlian phenomenology are consciousness, intentionality and the phenomenological reduction (Dowling, 2012; Willis et al., 2016). Husserl's philosophical assumption in his seminal work ***"Logical Investigations"*** *(Philosophie der Arthmetik, Psychologische und logiche,* (1990-1901), was the study of things as they are shown through human consciousness which seeks to delineate the nature of *being* (essence of experience) "*essence"* denotes the *a priori* (before), which in its view is the crucial systems of subjective experience (Wrathall, 2013). For Husserl, the *essence* of phenomenon is revealed through subjective experience in constructing an individual understanding of realism. The goal of Husserl was to understand the epistemological question of knowing which concentrates on human experience as a primary source of knowledge (Koch, 1995; Laverty, 2003).

His theoretical thinking led to descriptive phenomenology which seeks to describe the *essence* of experience (Lopez & Willis, 2004). Husserl employed Brentano's (1874) descriptive idea of intentionality as a way of appreciating intended deliberate action (Dowling & Cooney, 2012). In addition to His philosophical intentions is the idea about phenomenological reduction or "bracketing" (*epoché*). The implication is that a phenomenological researcher suspends or separate their hypothesis and presuppositions around an occurrence so that the *essence* of existential experience of survival of the subject under investigation grasped (Lopez & Willis, 2004; Racher, 2003). In order to avoid personal biases, Husserl believed that there is a need to bracket one's everyday perceptions of his or her lived experiences with the aim of achieving transcendental subjectivity. This means consciousness as it is in itself, whereby the investigator capably suspend his or her own assumptions and personal experiences and describe the events under study in an unadulterated manner without affecting the objective of the study (Lopez & Willis, 2004; Wojnar & Swanson, 2007).

Heidegger's Phenomenology

The German philosopher Martin Heidegger (1889-1976) was a student of Edmund Husserl and later as his successor and eminent critic of his philosophical ideas (Dowling & Cooney, 2012; Healy, 2011). In Heidegger's ***"Being and Time"*** (*Sein und Zeit*) 1927/1996[4]) he disagrees with the phenomenological theory by Husserl's assumptions about epistemological knowledge of phenomena, proposing that realisation can never be apart from is not separate from our life- world. Rather he believed that phenomenology is founded on human knowledge and making meaning of our very own *existence* ***(Existenze)*** in the world (Dowling, 2007; Laverty, 2003).

Heidegger and *Meaning*

Meaning (*Sinn*) as explained by Heidegger is an understanding that stems from a projection and enables us to understand a particular *entity*[5] wherein something maintains itself intelligibility[6] (Inwood, 1999). '*Meaning* is that in terms of which something becomes comprehensible as something' (Wrathall, 2013, p. 85). *Meaning* therefore, is the means whereby things manifest

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[4] References in this study to ***"Being and Time"*** by Martin Heidegger are drawn from the translated version by Joan Stambaugh 1996. *'Sein und Zeit.'*

[5] 'An 'entity (*entities)'* or a being (*ein Seiendes*) is anything that in any sense is as an object or things'(Gorner, 2007, p. 15)

[6] Something capable of being apprehended by the mind alone

appear for themselves and which is associated by how individual understand the world in which he/she live.

The main theme underpinning the philosophy of Heidegger is the question related to the *meaning* of *Dasein's being* (Dowling, 2007; Mulhall, 2013). Heidegger's philosophical focus on ontology - the subject of *being* of *entities*. For Heidegger, the attention of a hermeneutic investigation is on an individual knowhow or their *life-world* (*Lebenswelt*) rather than revealing knowledge through consciousness (Healy, 2011). He developed phenomenology into a hermeneutic or interpretive philosophy with the aim of uncovering the *meanings* in people's life experiences (Koch, 1995; Laverty, 2003; Lopez & Willis, 2004). Heidegger questioned Husserl's concept of subjective experience of phenomenology as a virtuously viewpoint of ideas stating:

> 'There is no pure phenomenology ... according to its *essence;* it is loaded with assumptions, as is all human activity. The task of philosophy is not something like doing away with pre-understandings at any cost, but rather admitting them and gearing the investigation to them positively and in a way based in its matters' (Dreyfus & Wrathall, 2008, p. 164).

Heideggerian hermeneutic philosophical ideas necessitates that the individual undertaking the study to pursue an appreciation of the notion the "*meaning* of *being"* in his or her everyday world (Heidegger, 1996).

To understand Heidegger's' term – "*being"*, He then introduces the idea of "*Dasein"* which means "*being-there",* the way humans or individual relate and exist in the world (Inwood, 2000a). In "***Being* and *Time",*** Heidegger (1996) set out to discover the universe by focusing on individual object – "*entities*" found in it and "*Dasein"* relationships within these *entities*. This is influenced by the way people view and understand these *entities* through experiences in the world. He argues that

“*Dasein”* is the solitary *“entity*” that possesses an appreciation of “*being”* and clarify that there is no other *entities* apart from our individual understanding of being (Heidegger, 1996).

Heidegger proposes that *Dasein* can exclusively be comprehended by having a day-to-day experience to and experience of the world as we live (Heidegger, 1996). For Heidegger to understand our *existence* in the world there is the need to continuously interact with the *entities* that give *meaning* to the nature of our *being* we encounter within one’s *life-world*. From Heidegger’s perspective our day-to-day interaction of “*being-in-the-world”* is not to isolate our self from others but *meaning* is found as we engage in activities in the world from our own background and experiences (Johnson, 2000).

“Heidegger’s Concept of *Dasein* (*‘being-there*’)”

The concept of *Dasein* is fundamental to Heideggerian hermeneutic phenomenology (Heidegger, 1996). The dominant precept underneath the philosophy of Heidegger’s phenomenology was to discover the *meaning* of *being* herein *Dasein* ‘s unique ontological construction on humans are appreciated (Heidegger, 1996). Heidegger formulated the word *Dasein* which means the sense of *‘being-there’, to exist* or to *be there’* (Inwood, 2000a, p. 22).

Heidegger claims that “*Dasein*” is the only type of *“entity”* that demonstrate a subjective appreciation of “*being”* and that the principal occurrence that is related to phenomenology is the understanding of “*being”* (Wrathall, 2013). *Dasein* as explained by Heidegger relate to humanity and the kind life of relation that humans possess and *Dasein* understands itself in its *being*. As human beings we constantly interact with individuals and other objects surrounding us as well as potentials from the collective we inherit (Heidegger, 1996). Hence, the only possible way to appreciate the concept of our existence within the framework of incessant interrelation with other objects in our *life-world.*

“Heidegger’s *being-in-the-world* (*In-der-Welt-sein*)”

Another distinguishing feature of *“Dasein”* from other *entities* is the concept of “*being-in-the-world”.* Heidegger describes our status as *being-in-the-world* and he write and separate the term with a hyphen “*being-in-the-world* (*In-der-Welt-sein*)” to designate the way human beings exist and interact with others in the *world* (Mulhall, 2013; Wrathall, 2013).

Heidegger distinguishes the *being* of humans from other *entities* in the world in the universe with the fact that unlike other *objects*, *Dasein* has no definite *essence* but rather as entity that interpret its own *essence* (Inwood, 2000a; Wrathall, 2013). Its’ *essence* is not originate in the absence of a very important feature in the old-fashion wisdom and proclaims, that the important of “*Dasein”* is in its survival state of being (Wrathall, 2013, p. 6).

> ‘The *essence* of *Dasein* lies in its existence. Accordingly those characteristics which can be exhibited in this *entity* are not ‘properties’ *present-at-hand*[7] of some *entity* which ‘looks’ so and so and is itself *present-at-hand*; they are in each case possible ways for it to be, and no more than that … so when we describe this *entity* with the term *‘Dasein’,* we are not expressing it’s; ‘what’ (as if it were table, house, or tree) but it’s *being*’ (Inwood, 2000a, p. 23).

For Heidegger, *Dasein* is said to be distinctive among *entities* in that it does not just occur; rather, its *being* is an issue for it (Inwood, 2000a). Heidegger reiterates that the *being* of *Dasein* cannot, then, be applied to other types of *entities* such as physical objects and animals precisely since we never question them for how and what to be they simply are what they are (Mulhall, 2013; Wrathall, 2013). Heidegger explained that, our means of existence is not linked to our way of thinking intelligibility but in our very *being* in a universe as our existence is closely related with the world that we find ourselves in (Mulhall, 2013).

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[7] *Present-at-hand* is described the mode of *existence where entities* are separated *from its intended use* (Dix, 2010).

Modes of Existence

Dasein's Existence (*Existenze*) *in-the-world*

Heidegger looks at three different modes in which *Dasein* exists and encounter things in the world. He analysed the structure of things not only as *they* are encountered in the detached, theoretical attitude of consciousness (like Husserl), but also in daily life. Heidegger draws threefold distinction between *authenticity (eigentlichkeit), inauthenticity (uneigentlichkeit)* and an *undifferentiatedness (Alltäglichkeit)* average everydayness (Dreyfus & Wrathall, 2008; Heidegger, 1996).

Authenticity (eigentlichkeit)

For Heidegger, being *authentic* is about how we approach the world in our daily activities. In *authentic* mode of existence, *Dasein* understands one's own person with its own possibilities where it takes an appropriate action and discovering the world in its own way. Heidegger asserted that 'to be *authentic* is to be truthful to your own self and taken responsibilities for your actions and decisions (Inwood, 2000b, p. 26). Being true to oneself and acting according to one's own accord is *authenticity*. '*Authentic Dasein'* take a move without the dictate of societal standards and instruction to validate his or her actions but act resolutely[8]' in order to properly understand itself (Wrathall, 2013, p. 30).

An *authentic* person may act in a way which is morally acceptable in the world and has the freedom to make its own choices without the dictates of the '*they*'[9] world (Dreyfus & Wrathall, 2008). In this sense, being *authentic* is to discover the world in your own way. As an *authentic being* there is the need to recognise one's dispersed condition and take the steps to overcome it (Cerbone, 2008; Wrathall, 2013). This implies that an *authentic Dasein* must make choices and not let the others choose for it. *Authentic Dasein* is exposed the demand the demands of status quo and having recognised the problem, responds to the situation appropriately. However, being true to oneself

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[8] 'Resoluteness' refers to *Dasein's* understanding of itself as human *being* ultimately responsible for its own life.

[9] Heidegger calls other humans in the world as the '*they*' (*das Man)* to describe unknown day-to-day way in which *Dasein* act resolutely the opportunities for each individual being (Inwood, 2000a, p. 12; Wrathall, 2013)

does not mean that one is moving away from the *they* world, but rather taking responsibilities for our own decisions to attain a unique identity for itself.

As Heidegger explained:

> 'So, in *authenticity*, I take up the public understanding of my world, and I make it my own by *projecting* on my own possibilities. I do this through anxiously seeing the *uncanniness*[10] of myself in my world' (Dreyfus & Wrathall, 2008, p. 8).

In the case of women diagnosed as being infertile and having acknowledged their infertility (*authentic self*), they then chose IVF method to fulfil their wish in belonging to the mother world (*authentic self*).

Inauthenticity (uneigentlichkeit)

Inauthenticity represents the average everyday mode of *Dasein* existence and the *they* (*das Man) self*. Heidegger calls others in the world as the *they* to refer to anonymous every day way in which *Dasein* determines the possibilities for each individual (Inwood, 2000a; Wrathall, 2013). *Inauthenticity*, can be described as *Dasein* hidden its *being* from itself and being absorbed through *falling*[11] (*Verfallen)* into the *they* world.

For Heidegger, an *inauthentic* person lack a genuine sense of independence and *conform*[12] **i**ts very existence to the prospects of what the *they* does and think (Inwood, 2000a). In effect people simply follow the ways in which one does things without thinking about it, acting as an 'anonymous follower of norms' (Wrathall, 2013, p. 12). However, Heidegger explains that without the possibility of *authenticity*, whereby the person experiencing the problem takes charge of their personal choices and thus reaches exclusive distinctiveness, there would be nothing but to *conform* to social norms

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[10] *Uncanniness*, explicate the quality of state of being impossible to know or beyond the normal.

[11] Falling: The way an individual respond and absorb in the societal world (Wrathall, 2013, p. 17).

[12] Conformity; Heidegger uses different words for conform and explain it as accepting simply, the ways one does things and act accordingly without thinking about it - *Conformity* thus provides the ground – the planning of our common world – against which we are freed to make essential decisions. Heidegger calls this sort of social *conformism inauthenticity* (Wrathall, 2013, p. 12).

(Heidegger, 1996), '*Dasein's* situation with unique societal standards and regulations and opportunities form the basis for living and making sense' (Cass, 1998, p. 330).

This means choosing not to be oneself (*inauthentic*) prevents man from relating with the world and understanding it in its own ways. Instead, man understands the world in the way the *they* make it available to it. This will also take away from man the possibilities of *authentic self*-understanding. Consequently, man accepts the prevailing opinions and *conforms* to what the *they* does and thinks. As a result, one's own *Dasein* gets completely dissolved into a kind of *being-of-the-others* (Heidegger, 1996).

In our everyday world it is *inauthentic* for a woman not to get married and not to become pregnant as our social norms and practices dictate since the *essence* of a woman is to give birth. So choosing not to be oneself (*authentic self*) means you are *conforming* to the *they* world thereby loosing self-identity in the society.

In these instances, one becomes separated from the daily life course and routines *falling* with the roles prescribed by others and as such impedes an individual's one's potential of existing in this universe. In order to make the change to our true way of living, one must be genuine and consistent in our thinking by being accountability for our own choices thus attaining a distinctiveness in *being in-the-world*. This may explain why women undertook IVF treatment with the possibilities of becoming a mother. These *being-in-the-world* motherless women selected the treatment over other equally important commitments of their lives and sought for IVF treatment which may help them become pregnant and belong to a world purpose to be a mother (*authentic being*).

In "***Being and Time"*** Heidegger makes a clear differentiation between being anxious *(Angst)* and fright (fear) *(Furcht)*. He proposes that fear, a dread or distress induced by object whereas anxiety is a feeling or mood metaphysical awareness of an experience within a life which provides genuine understanding into what it takes into itself (Moran, 2000; Withy, 2012). Heidegger termed moment of disruption anxiety (*Angst*) which is that mood in which *Dasein* is anxious about its *existence* in the world (Mulhall, 2013). It is defined as *Dasein's* possibility of *being* and its state of mind about something, itself, in this case, *being-in-the-world* of motherless. Heidegger asserts that when we allow ourselves to be overcome by anxiety (*Angst)*, *Dasein* denies us from the ability to do any meaningful activities which may prevent *Dasein* from understanding its *authentic* possibilities (Wrathall, 2013). Like anxiety, *Angst* as explained by Heidegger is a rupture in a life and a crisis of everyday life events (Withy, 2012; Moran 2000).

Heidegger suggested that through anxiety (*Angst*) we can interpret the *meaning* of our *existence* and subject it to philosophic research and *being*. Nonetheless anxiety *(Angst)* enables the likelihood of true personal insight concerning the fact that we are just entity in the universe whose actions are controlled by the communal standards. Hence anxiety *(Angst)* let us to recognise who our human existence and challenges in our environment for possible resolution (Wrathall, 2013). *Angst* could possibly be a means of showing genuineness as well as serving as an illuminating occurrence for these women who were not successful with IVF treatment. Such a crisis experience has a consequence for how individuals lead their lives.

Undifferentiatedness (Alltäglichkeit)

The *undifferentiated* mode-of-*being* is known to be neither *authentic* nor *inauthentic*. In *undifferentiated* mode, *Dasein* survives devoid of interrogating life occurrences and overshadows the chances of making sense of individual's *existence* in the world. This does not imply that *Dasein* has stopped caring about its *existence* in the world, but rather disclosedness of *Dasein* remains *undifferentiated* (Dreyfus & Wrathall, 2008; Mulhall, 2013).

Heidegger and *Sorge* (care)

For Heidegger, the *being* of *Dasein* as (*Sorge*[13]) means to 'care' (Inwood, 2000a, p. 58). Heidegger asserts that to be with another is to care and recognise care as being of *Dasein* an when claimed that all one does in the world can be appreciated as a mode of caring.

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[13] *Sorge* (care) to care and show concern *Besorgen* (concern) and *Fürsorge* (solicitude) of *Dasein's* existence in the world (Cerbone, 2008, p. 57).

Caring is a prominent theory in the nursing profession which is a universal need in the provision of nursing services. The concept of care is important for Heidegger as care unites the varying structural features of *Dasein's* mode of *being-in-the-world* (Dreyfus, 1992*)*.

In addition to its ordinary with available *entities*, Heidegger identified caring as its concern *(Besorgen)* and caring as taking over others concern as *solicitude (Fürsorge)* and assert that *Dasein*'s reality and the nature of *being* and their relation in their *life-world* is care (Inwood, 2000a; Wrathall, 2013). As *entities* we exist in terms of what matters to us and care about things which mostly concerns us. *Being-in-the-world* of motherless *they* understood that they exist as an *entity* of 'care', in terms of showing concern for and taking responsibility of their motherless *being-in-the-world* by seeking IVF treatment with the hope of identify themselves *being-in-the-world* of motherhood.

The basic structure of *Dasein* is primarily understood as care. Heidegger further explained that the notion of care points ahead of *Dasein's* temporal nature which unifies its past, present, and future (temporality). Heidegger acknowledged *Dasein's* temporal existential time as *'Ahead-of-itself'* which presupposes *Dasein's* openness to the future; *'already-being-in'* designates *Dasein's* openness to the past and '*being-alongside*' indicates the process of making present (Mulhall, 2013, p. 160). For *Dasein* to disclose *entities* is for it to manifest a present concern in our own experience with the world, which grows from its having taken on a project and being oriented towards its future realisation (Wrathall, 2013).

Thus, *Dasein's* past is associated with *thrownness (Geworfenheit*) and *facticity (Faktizität)* that determines *being.* The present is characterised by *fallenness* and the future which corresponds to understanding or *projection* (Cerbone, 2008; Inwood, 2000a). Through care, *Dasein* becomes aware of life challenges and opportunities in the world (Wrathall, 2013). These three aspects of care *(Thrownness, projection and fallenness)* is internally related which unifies *Dasein* as whole.

"Thrownness" is a distinctive feature of *Dasein*-denotes how individuals is found him/herself in a circumstances where we have no choice but find solution to it. *Thrownness* explains a feature of individual subjective existence where we approach the future from the past. Heidegger explained that, *Dasein* is characterized by its *thrownness* where it finds itself always in a world into which they were born with already existing norms, values, and culture. *Dasein* understands each possibility by *projecting* itself onto future and understanding through *ready-to-hand*[14] encounters in the world (present). In this *fallenness, Dasein* exhibits care by demonstrating its possibilities through *everydayness* of the *they* world where we are faced with different alternatives and decides which cause of action will help attain identity (Cerbone, 2008). *Thrown* into this world of being infertile, the motherless attune themselves by creating their existence in terms of what they see as possible by seeking IVF treatment with the hope of belonging to a world of motherhood.

My interest in this study emanated from my personal experience of having lived my life as motherless and struggled for almost 11 years of trying to be pregnant through different modalities of treatment including assisted reproductive technology (ART). I have experienced three previous failed IVF treatment cycles and if IVF cycles fail it can be very difficult to come to terms with and to understand why it failed.

My experience of having been childless prompted the inquiry into the experiences of **Mavis, Juliet, Francisca, Akos, Lois** and **Isha** (chosen pseudonyms by the participants) who have also undergone IVF but the treatment was not successful. The choice of Heidegger's hermeneutic phenomenology for this study may accord me the prospect to appreciate the participant's struggles with IVF treatment and subsequent failure. My lived experience may also assist the interpretation of the participants' experiences and hidden meaning(s) of failed IVF treatment.

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[14] Heidegger calls *readiness-to-hand* as the kind of existence where most *entities* we need in our daily living is readily available (Wrathall, 2013, p. 5).

This inquiry asks '*What is this or that kind of experience like?*' as it attempts to uncover meanings in our *everyday* experience (van Manen, 1990, p. 9). In response to the question, 'What does it mean to be motherless in the world of motherhood and going through IVF failure?' there is the need to explore this phenomenon to understand the realities of IVF treatment. I equally identify this research aim of bringing to light what the women have gone through which I have experienced first-hand.

In this chapter, I have reviewed the theoretical underpinning of the research and the application of the major philosophy of Heidegger which are *Dasein*, *being-in-the-world*, modes of *being* (*authenticity, inauthenticity* and *undifferentiatedness*) and the care structure of *Sorge* (*thrownness, projection* and *fallenness*)

CHAPTER FOUR

Methodology and Research Method

Introduction

This chapter explores the methodology and the research method undertaken for this study. The purpose is to demonstrate an appropriate method that promotes an in-depth understanding of the participant's experiences of unsuccessful IVF treatment.

In phenomenological research, methodology and method(s) are two different concepts. Research methodology is concerned with the philosophical framework and underpinnings that guided the method by which the researcher acquires knowledge about the phenomenon of interest. Research method on the other hand involves the learning of the procedure or process for carrying out the research which aims at finding solution to a problem (Fouché, 2014).

The Different Approaches to Qualitative Research

Qualitative research methodology is a realistic inquiry which explores the subjective experiences of human beings. Within a wholistic framework, the qualitative research explores the depth, richness, and complexity inherent in phenomena and attempts to interpret or make sense of the *meaning* people attach to their experiences (Polit, Hungler, & Beck, 2006). The findings from the in-depth qualitative research are typically grounded in the real-life experiences of people with first-hand knowledge of the phenomenon under investigation.

There are different approaches to qualitative research, which include phenomenology, grounded theory, case study, ethnography and participatory action. The most popular qualitative approaches used in nursing research are ethnography, grounded theory, and phenomenology. More recently, nurse researchers are engaging with narrative and discourse analysis and interpretive phenomenological analysis. I have also engaged with my supervisor to use the language of phenomenology which is unique to both the philosophy and the methodology (Table 3).

QUALITATIVE & QUANTITATIVE RESEARCH TERMINOLOGY	PHENOMENOLOGICAL ‘LANGUAGE’
In phenomenological research, methodology and method(s) are separate concepts. Methodology concerns with the philosophical framework and underpinnings that inform the method to be used and method refers to the procedure for carrying out the research aim at finding solution to the problems.	
Assumptions	Pre-understandings. Can also use pre-conceptions. Must include ontological, epistemological and methodological
Recruitment of subjects/informants. Allocated P1, P2	Invitation of participants. Preferably give a pseudonym
Semi- structured interview/tool	Phenomenological conversation
Data collection	Information/material gathering
Data	Phenomenological texts or narratives
Data analysis – coding, sorting	Information/material unravelling
Data saturation	Hale, Treharne and Kitas claim ‘that real data saturation can never really be achieved’ because each individual’s experiences are so unique (Hale, Treharne, & Kitas, 2008, p. 91). Information rich/material
Trustworthiness	Expressions of Rigour • Balanced integration • Openness • Concreteness • Resonance • Actualisation
Formulation of themes	Unravelling of lived experience themes to capture the essence or meaning and authenticity

Table 3. The Language of Phenomenology (Fouché, 2014).

Heideggerian Hermeneutic Phenomenology

Martin Heidegger's philosophy of phenomenology holds an *existential* viewpoint that human being cannot be separated from their world as a person's *lived-world* is experienced through situations and relations.

Heidegger stated that there is a need to return '*to the thing themselves'* which means to interpret the experience as it lived and not only describe it (Heidegger, 1996, p. 24). He emphasised interpretation and understanding and not just describing human experience, and the aim is to uncover meaning and develop a deeper understanding of the everyday experiences of a phenomenon.

As emphasised by van Manen the *meaning* of hermeneutic phenomenological method ultimately lies in interpretation (van Manen, 1990). Heidegger believes that lived experience gives *meaning* to each person's perception of a phenomenon. Through phenomenological conversations, the researcher strives to gain entrance into the participant's world to uncover the *meaning* of participants' lived experiences.

To fully understand the lived experience and *meaning* of participants who have undergone IVF treatment, but the procedure was not successful, Heidegger's hermeneutic phenomenology is deemed an appropriate method. Heideggerian hermeneutics interpretive phenomenology is a research method that seeks to interpret the human lived experience using language to provide both understanding and knowledge (Draucker, 1999; Thompson, 1990). This inquiry often focuses on *meaning* and understanding of how human beings interpret the world within their socio-cultural context.

Heidegger's hermeneutic interpretive phenomenology allows for the interpretation of phenomena to uncover hidden *meaning* as a way of understanding the nature of *being-in-this-world.* Heidegger's hermeneutic philosophy of phenomenology is deemed an appropriate methodology to answer the research question, *“What does it mean to be motherless-in-the-world-of-motherhood and going through IVF treatment failure?”*

To uncover what *meaning* women give to their experiences of unsuccessful IVF treatment, Heideggerian interpretive phenomenology was chosen as the research methodology. This research study was based upon developing a phenomenological investigation to explore women experiences of unsuccessful IVF treatment. Heidegger’s philosophy of phenomenology is a research methodology suitable in interpreting the motherless women experiences as it lived.

Heidegger calls our basic structure of our understanding as fore structures of understanding (also referred to as pre-suppositions, pre-understandings, preconceptions or prejudices) (Geanellos, 1998). Heidegger explained that we always approach a phenomenon with *fore-having (*which means *a priori* understanding of a phenomenon), *fore-sight* (refers to the specific insight that make interpretation possible) and fore-perception (prior preconception or idea that guides interpretation) (Smythe, 2011). These interpretive processes (fore-having, fore-sight, and fore-conception) together constitute what Heidegger calls the fore structures of understanding (Heidegger, 1996)**.**

In a hermeneutic phenomenological study, it is critical that the researcher examine and make explicit his or her understandings, beliefs and assumptions that may influence the research process (van Manen, 1990). Gadamer argued the horizon or prejudice that a researcher brings to a study produced understandings that influence interpretation which helps us to fully commit to a phenomenon (Gadamer, 1976).

In agreeing with Heidegger’s notion of fore structures of understanding, (pre-understandings) were explained under the following headlines: ontological, epistemological and methodological.

Ontological Pre-understandings

Ontology is the philosophy of human existence and being real, whereas epistemology concerns realism of our being and methodology explains the processes of learning to gain knowledge and used.

I have journeyed through infertility and different modalities of treatment including assisted reproductive technology (ART). My interest in this study stemmed from my encounters with women experiencing infertility issues and my experiences of infertility and repeated IVF failures. This lived experienced of unsuccessful IVF treatment offered me the opportunity to give voice to those Ghanaian women who are motherless.

Like many other life stresses, IVF treatment is not a discrete event but an unfolding process. Going through IVF treatment presents a stressful and often traumatic time in a woman's life, and failure to achieve biological motherhood can leave women feeling devastating. If IVF cycle fails it can be challenging to come to terms with and to understand why it failed.

As a professional nurse and a woman who has experienced both failed and a successful IVF treatment, I realised that each of the women who had experienced failed IVF treatment had a story they wanted to share. My ontological pre-understanding of *being-in-the world-of-motherless* is not something I can set aside as it is already with me in my world and this may also provide an understanding that influence interpretation of the phenomenon under study.

Epistemological Pre-understandings

I had a prior knowledge of the phenomenon understudy from my experience as nurse and as a nurse educator.

Also, by interacting with the women living with infertility who shared their painful stories about their struggles with infertility and many treatment modalities was helpful in attaining significant insight of the phenomenon under investigation. This knowledge was acquired through this occupational closeness and the role of a health care provider.

Phenomenology seeks to grasp an understanding of knowledge and knowledge about existence, interpretation, and conceptualisation. My practical disclosure to IVF treatment failure also helped in gaining *a priori* knowledge of the phenomenon of interest. Through this struggle, I was able to have foreknowledge about the processes involved in IVF treatment.

Understanding the cultural background and language in the context of being infertile and experiencing repeated IVF treatment cycles, I was able to interpret the *essence* of the participants' experiences. Reflecting on these experiences helped me, not only in the discovery of knowledge of the phenomena but also brought transparency to the research and disclosed how that knowledge had been acquired.

Methodological Pre-understandings

My experience of having been motherless prompted the inquiry into the experiences of the study participants who have also undergone IVF but, the treatment was not successful. The choice of hermeneutic phenomenology for this study may afford the opportunity to gain knowledge of the participant's experiences of not achieving a successful IVF treatment. My lived experience may also assist the interpretation of the participants' experiences and hidden *meaning(s)* of failed IVF treatment.

This inquiry asks '*What is this or that kind of experience like?*' as it attempts to uncover *meanings* in our *everyday* experience (van Manen, 1990, p. 9). I believe embarking on this phenomenological journey may reveal the purpose of this kind experience for the participants, and likewise for *my-being-in-world*. Heidegger's hermeneutic philosophy was deemed an appropriate method to explicate the research question, '*what it means to be motherless in-the-world-of-motherhood and going through IVF treatment failure?'*

Within phenomenological research study, it is critical to ensure the credibility and trustworthiness of the researcher. During the information gathering process, I kept a journal where I recorded my observations, impressions, personal reflections, and any events which may have occurred concerning the research process. Keeping a reflexive journal and providing feedback to the study participants helped in establishing credibility and minimising potential bias during the research process.

In agreeing with Heidegger's phenomenological concept of making explicit our for-knowledge during a study, instead of suspending my assumptions, my preunderstanding was thus made known as part in the research , wherein *meaning* became explicit (Whitehead, 2004).

This study adopted the philosophy of Heidegger's phenomenology and the three modes of *being* as the philosophical underpinning to explore motherless women experiences with unsuccessful IVF treatment. Max van Manen's (1990) six research stages guided and informed the hermeneutic phenomenological interpretive process.

Research Method

Van Manen states that, it is crucial for researchers interested in doing phenomenological human science take notice of the following:

1. 'Phenomenology is not an experiential logical science.' As explained by van Manen phenomenology is not to generate empirical facts or theory but phenomenological knowledge is empirically based on understanding of people's lived experiences. He explained further that the tendency to generalised experiences may prevent us to understand the meaning people assigned to their unique human experience.

2. 'Phenomenological inquiry is not based on speculation but rather factual presentation in the sense of unsophisticated reflection.' Phenomenological research is based on empirical data or begins from people's lived experience and not influenced by merely theoretical methods of achieving insight about the meaning of people's lived world. He explained that phenomenology is rooted from the western philosophy the goal is to attain theoretical insight about existing

individual life experience through the use of speech. Wherein eastern philosophy is based possibly on other non- written-oriented thoughtful research methods.'

3. 'Phenomenology is unique and universal.' Phenomenology is a unique and distinctive inquiry which involves a universal character of knowledge.

4. 'Phenomenology does not provide solution to problems but rather seek meaning of a phenomena.' The aim of phenomenology is the *essence* of *meaning* people ascribed to their lived experienced and no to solve problem. He argued that any research study that seeks answers to a problem is concluded when solution is found to the problem. In phenomenology, researchers' asked meaning questions to understand the significant of a phenomenon. Hence meaning questions cannot be treated as a problem to be solved and concluded but rather inquire into, to obtain a deeper meaning so that it will become object of reflection in our everyday conversational relations (van Manen, 1990, pp. 21-24).

Van Manen (1990) recognised activities which provide the researcher with a logical framework in a interpretive phenomenological approach. His mythological structure is not iterative but a back-and-forth process among "six research activities". I followed van Manen's "six research activities" which briefly are:

1) 'Turning to the nature of the lived experience
2) Investigating experience as we live it rather than as we conceptualise it
3) Reflecting on the essential themes which characterise the phenomenon
4) Describing the phenomenon through the art of writing and rewriting
5) Maintaining a strong and orientated relation to the phenomenon
6) Balancing the research context by considering parts and whole.'

(van Manen, 1990, pp. 30-31).

Inclusion Criteria and Exclusion Criteria

Inclusion Criteria

- Women diagnosed with infertility problems with a minimum of one oocyte retrieval and embryo transfer procedure in assisted reproduction health facility
- Women diagnosed as infertile who had experienced at least one IVF treatment cycle failure before the commencement of the study
- Women diagnosed as infertile who communicate comfortably either in English or local Akan language (Twi)
- Women living with infertility who had not achieved a live birth following IVF treatment
- Adult women aged 18 and above who have had at least a cycle of IVF treatment failure prior to the commencement of the study

Exclusion Criteria

- Women who gave birth using assisted reproductive technology
- Women who had intrauterine insemination (IUI) or gamete intra-Fallopian transfer (GIFT) procedures were not included in the study
- Participants who declined audio recording before or during the phenomenological conversation and feedback sessions were excluded

Gaining Access and Recruitment

Gaining access means that the researcher can observe the situation, talk to the individuals involved, read the necessary documents and interview potential participants (Holloway & Wheeler, 2010).

Gaining entry typically involves negotiations with gatekeepers who have the authority to permit entry into their world. In qualitative research, gaining access is likely to be an ongoing process of establishing relationships and rapport with gatekeepers and others at the site, including prospective participants (Holloway, Galvin & Holloway, 2017). The starting point in gaining entry, as stated by Holloway, Galvin & Holloway (2017), is the first and most crucial step of obtaining ethical permission. Therefore, for this study the process began with securing ethical approval from the Faculty of Health Sciences Human Research and Ethics Committee (HREC) and all research committees at the Ruma fertility and specialist hospital. I negotiated access through the Medical Director in charge of the clinical setting. Prior to the beginning of the study, an appointment was made with the CEO of Ruma fertility and specialist clinic to discuss the proposed study and to seek permission to conduct the study at the hospital. He then agreed and introduced me to the counsellor for the necessary assistance. The hospital counsellor facilitated access to the clients' records by contacting the prospective participants for the research. I then contacted the potential participants with the help of the counsellor at the fertility clinic, and if they agree, I then invited them personally to the study.

Nonetheless, as indicated by Holloway and Wheeler (2010), the access process was continuous throughout the research by verbally renegotiating consent before the start of each phenomenological conversation. Informed consent from the participants also helped in addressing the issue of women's voluntary participation and confidentiality. Access, then, is not a straightforward process of speaking to the person in charge and obtaining the approval of the ethics committee. It usually involves considerable time and effort and a constant endeavour to strive for cultural acceptability with the gatekeepers and participants in research sites. I must confessed that I faced a big problem with regards to gaining access to participants for the subsequent phenomenological conversation and the follow up sessions due to issues of call back and participant reluctant to participate due to their busy work schedules.

Invitation of the Participants

Following ethics, approval from the Faculty of Health Sciences Human Research and Ethics Committee (HREC) and all research committees at the Ruma fertility and specialist hospital, participants were identified and invited from the fertility's clinic database if they met the inclusion criteria for this study.

I did not anticipate any dependent relationship with any of the participants. The participant's consent to participate in the study resulted from their understanding of the study and was not influenced by the relationship with any of the healthcare practitioners at the clinic.

Prior to individual phenomenological conversations, the participants were informed of the nature and purpose of the study, process for complaints and withdrawal from the study if they wish to. The participants received an information sheet about the study, and a formal consent was obtained by signing a consent from their understanding and willingness to participate in the study.

I notify the participants that the conversations would be audio-taped and assured them of their anonymity and confidentiality. All related questions were answered appropriately, and we agreed on a convenient date, time, and place for the conversation.

Role and Responsibilities of the Researcher within the Context of the study

The role of the researcher in qualitative research is to attempt to access the thoughts and feelings of study participants. However while the data are being collected, a primary responsibility of the researcher is to safeguard participants and their information gathered.

Prior to the beginning of the phenomenological conversations and the follow-up feedback sessions, it was my role as a researcher to adhere to the ethical considerations outlined in the research. Before I could have the phenomenological conversations and the follow-up feedback sessions, it was my responsibility as a researcher of phenomenology to behave honestly and ethically in the course of the research process. My responsibility as a researcher of phenomenology was to listen to the women in a way that strived to understand the meaning of what was said and to respond appropriately with any challenging and engaging issues.

Again, during the course of information gathering my role as researcher was that of an active facilitator to enable the participants talk about their thoughts, feelings, views and experiences. This means managing the research process to ensure that the essential issues are covered to the required depth, without influencing the actual views expressed. Managing the conversation process involves ensuring coverage of the agenda to be discussed within the conversation, steering the participants back to topics from which they stray. It means exercising judgement about the length of time that should be devoted to the conversation. It was my responsibility as a phenomenological researcher to decide what questions are asked and how they are phrased, and how to follow up until a satisfactory answer has been obtained.

Another important part of my role as a phenomenological researcher was to help the participants to see what their role is in the phenomenological conversation process and the feedback sessions. I made the participants to understand that their role is to give fulsome answers, to provide more depth when probing questions are asked, to reflect and to think, and to raise issues they see as relevant but which are not directly asked about. Maintaining flexibility and good rapport throughout the phenomenological conversation and the follow-up sessions enabled a natural flow of conversation during the information gathering process.

My other concern was that of remaining emotionally and even ontologically uninvolved during the women’s phenomenological conversations and feedback sessions should they become emotionally distress. At the beginning of the study I realised that I was exploring a sensitive and highly emotional topic therefore, the well-being of participants was crucial throughout the entire study. Consequently, the study was conducted in a way that elicited information in a delicate, sensitive manner. The researcher, however, cannot allow preconceived attitudes or over-involvement to influence the information gathered. In order to guard against over-involvement with the participants, I needed to be careful to distinguish between my role as a phenomenological researcher and that of a therapeutic roles as this may lead to finding it difficult to separate my own experience or biases from that of the participants. Nevertheless, health professionals cannot completely detach themselves from their participants, particularly in the close relationship of the qualitative research process. My relationship was built on mutual trust. In order to gain access to the true thoughts and feelings of the participants, I adopted a non-judgemental stance towards the thoughts and words of the participants particularly during the phenomenological conversations. This was aided by my ability to adopt a reflexive approach within the research. Being reflexive places a requirement upon the researcher to locate themselves within the context of their research. I made them aware that my role as a researcher was not to provide therapeutic nursing care but in case participants are threatened by the research or feel that they are, they would be offered the needed support by referring them appropriately. However it was my responsibility to protect the women wellbeing.

As the conversation ensues, it was my responsibility as a researcher to monitor continually the vulnerability and consent of the participants so as to not stray from objective of the study. I also needed to monitor the development of trust with the participant to ensure that this trust is not abused inadvertently. I was also responsible to develop the capacity for independent, honest and critical thought throughout the research process.

In order to stay true to the phenomenon under study I kept a journal in which the content and process of interactions were routinely noted (Koch 1994). The reflexive journal acted as a useful record of events. In essence, the journal entry helped me to reflect on the issues relating to process and content associated with the information gathering.

The Researcher has a responsibility to communicate the research, and answer questions about the nature of the project as honestly and openly as possible without creating bias in the study. During the phenomenological conversations, some participants asked for advice about IVF process which was uncomfortable. I was aware that I should not be involved in a therapeutic relationship with participants and always ensured that boundaries were respected, reminding participants, when necessary, that I could not offer advice but stressed that this was an area to be discussed with their

IVF carers. In this way, I prevented my role as researcher from coalescing with my personal experience of IVF treatment and as a health professional.

Participant Sample Size

A purposive sampling method was used to invite six women who resided in the Kumasi metropolis, who were not successful following at least a cycle of IVF treatment prior to the initiation of the study.

My intention to select a sample size of six was that within phenomenological research, small numbers of participants is recommended to gather in-depth and quality information-rich material concerning the phenomenon under investigation. Phenomenological studies do not usually have predetermined sample sizes as the determination of the sample size is based on the depth rather than breadth of the informational needs (Morse, 2016). Lampley and Peters conducted phenomenological studies respectively on lived experiences of women undergoing IVF treatment. Both of these studies conducted detailed conversations using a sample of six participants voluntarily recruited (Lampley, 2010; Peters, 2003).

The Study Setting

The site of the research was Ruma fertility and specialist hospital located at the Ohwimase-Denkyemuoso road a suburb of Kumasi, in the Ashanti region which is the second largest city in Ghana popularly called the Garden City of West Africa. Ruma Fertility Hospital in Ghana is a state-of-the-art specialist hospital predominantly focused on delivering first class infertility treatment services in Kumasi metropolis and around. The hospital also has a state-of-the-art IVF laboratory and facilities for antenatal care and delivery, gynaecological care as well as other specialist services.

Image 2: State of the Art of Ruma Fertility and Specialist Hospital.

(With permission Hospital Management).

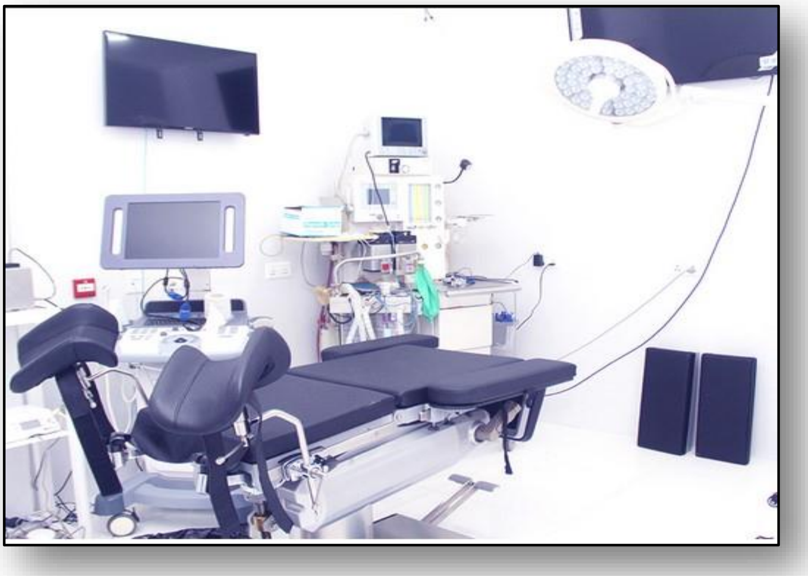

Image 3: Egg Retrieval Theatre.

(With permission Hospital Management).

Image 4: State of the Art IVF Laboratory at Ruma Fertility and Specialist Hospital.

(With permission Hospital Management).

The conversations were conducted at the participants' venues of choice. The participants chose the conversational setting for them to feel safe and comfortable while sharing their experiences. I conducted three of the initial phenomenological conversations at the participants' homes and two at the fertility clinic, and one chose to be interviewed at her workplace. The subsequent phenomenological conversations and feedback sessions were all conducted at the participant's homes.

Prior to the first phenomenological conversation, the participants were contacted to arrange for convenient place and suitable time. The women were also advised to choose a private place which is quiet to ensure confidentiality, a clear recording of the stories, and limited distractions.

The following ethical considerations were followed before conducting the phenomenological conversations, feedback sessions and during the write-up.

Ethical Considerations

In this study, I adhered to the principles of the World Medical Association Declaration of Helsinki (2013). The Declaration upholds the following principles when conducting research: respect for human dignity, informed consent, privacy and confidentiality, risks, burdens and benefit (World Medical Association, 2013).

Ethical approval for the study was obtained from the Faculty of Health Science Research Ethics Committee (HREC), University of Cape Town, preceding to the initiation of the study. Also, ethical clarification was also obtained from the Committee on Human Research, publications and Ethics (CHRPE) Kwame Nkrumah University of Science and Technology, (KNUST) School of Medical Sciences and Komfo Anokye Teaching Hospital Kumasi, Ghana and all appropriate research committees of the fertility clinic concerned (see appendix A, on page 259; B on page 261).

The Principle of Respect for Human Dignity

This principle includes determination by oneself without any course of action and the right to full disclosure. To ensure participants independency they were reassured that participation in the study is non-compulsory. They have the right to ask questions or to refuse to give information which they are not comfortable in the conduct of the phenomenological conversations, feedback sessions and during the write up of the study.

On the issue concerning full disclosure, this was observed by describing and explaining the nature of the study, my responsibilities as well as the likely risks and benefits that they may incur. The participants were assured that beside voluntary participation, they also have the right to withdraw at any stage of the study without the risk of incurring any penalty.

Informed Consent

Prior to all the conversations and feedback sessions signed consent was obtained from the participants in agreement to take part in the study. I also wrote to the participants to seek permission to use the information gathered when the study write up begins (see Appendix I, on page 271). To ensure the participants' right to informed consent, all the participants were given information sheet which entails an explanation of the study (Appendix H, on page 267). These documents (that is the information sheet and consent form) were also translated and made available to any of the participants who preferred to read and consent in the Twi language.

Risks, Burdens and Benefits

Another ethical consideration is the sensitive nature of the phenomenon being studied, which may have the potential to distress the participants when sharing their experiences. To minimise this, each participant was informed that the phenomenological conversations and follow-up sessions would be approached carefully.

As an experienced professional nurse and personal experience with this struggle of unsuccessful IVF treatments, I am equipped with the skills to discern fluctuations in episodes of emotional state and to offer the needed support appropriately. I reassured them that if this happens, I will immediately suspend the conversation temporarily rescheduled for me to arrange for a referral for counselling and psychotherapy. I also explained to them that debriefing session would be arranged for all them if required.

During the first conversation and the subsequent ones, the participants were offered the opportunity to express their emotions and feelings with support and encouragement.

Ensuring Anonymity and Confidentiality

Issues concerning true anonymity is challenging in qualitative research where the participant's narratives are presented and analysed as a whole and in detail to reveal the *meaning* of the participant's stories. I endeavoured to protect the participant's identity and made sure that information provided was held in confidence. Looking at the nature of the face-to-face conversation, full anonymity could not be offered, but each participant was allowed to choose a pseudonym to preserve their anonymity even though this allowed for limited anonymity. I also made sure that no identifying information was revealed in the write-up.

Issues with confidentiality and privacy is fundamental in nursing. All participants were assured of confidentiality. Confidentiality was guaranteed by ensuring that personal and identifying information gathered from the participants were kept in a private safe under lock and key which only the supervisor and I had access. Further, I pledged that any other information given will not be disclosed to the public domain or made accessible to persons not involved in the research unless on the condition of the participant's free and informed consent. Notwithstanding, all information has not been given to any other person apart from the researcher and supervisor.

My contact details were also made available should the participants had any questions regarding the research process for clarification. All efforts were also made to ensure that this study represents the captured unadulterated experiences described by the participants. The written narratives would be destroyed after the study has been completed and the electronic versions saved on my personal computer which is password protected to prevent any accidental breach of confidentiality.

Furthermore, after isolating the themes and interpreting the text, I went back to the participants for them to verify if the information was accurate and resonate with their experience.

The Phenomenological Conversation

Within phenomenological research, interview is the primary means of eliciting in-depth information from the participants with regards to the phenomenon of interest (Holloway, Galvin, & Holloway, 2017; Holloway & Wheeler, 2010).

The goal of the phenomenological conversation is not to predict or generate a theory but to uncover concealed meanings drawn from the participant's shared narrative in the context of the phenomenon of interest, and the meaning that shaped the experience (Birks, Chapman, & Francis, 2007).

Heidegger asserted that as self-interpreting beings we dwell in the participants' narratives by listening to each other's experiences acquiring knowledge of the *essence* of the phenomenon under investigation. The understanding gained becomes part of the self (Heidegger, 1996; Holloway & Wheeler, 2010). During the conversation, the researcher uses the narrative structure to convey practical knowledge from the participants, to preserve the contextual *meaning* of the information generated (Drew, 1993).

A semi-structured opening question and further probing questions were used to gather information which was reduced to sub-themes and main themes which captured the participant's lived experiences of IVF treatment failure. Prior to the commencement of the conversation, the phenomenological conversation prompt was reviewed by my supervisor to ensure that it was tangible and trustworthy**.**

Utilising this method, the participants became active participants in the communication process where they were able to reveal their subjective meanings through their shared stories of the lived experiences (Kreuger & Neuman, 2006). This also allowed flexibility for the isolated themes related to the participants' lived experiences.

All the participants' conversations were collected using face-to-face with semi-structured in-depth conversations that encouraged respondents to share their experiences.
The phenomenological conversation began with a rapport, and an open-ended general question:

"Please describe your experiences of unsuccessful IVF treatment?"

The Use of Transcribing Equipment

Holloway and Wheeler suggest three ways in which data (information) should be recorded during research interview. These are:

1. Tape-recording the interview
2. Taking Note during the conversation
3. Note taking after the interview has been completed (Holloway & Wheeler, 2010, p. 97).

In keeping with Holloway and Wheeler's recommendation, all the participants were informed that the phenomenological conversation (I prefer the term phenomenological conversation) would be recorded using the digital audio recorder for both the phenomenological conversations as well as the feedback sessions to which the participants agreed. The digital recorder was switched on only after an explanation about the research purpose was understood. They were also made to sign the consent form and they were reassured of full confidentiality but limited anonymity.

All the phenomenological conversations and the feedback sessions were conducted in Ghanaian language (Twi) and later transcribed verbatim into English language.

I also, followed van Manen's (1990) ideas that assumptions are constantly made during the research process. I kept a reflective journal in addition to the tape recording where I documented my observations, thoughts, and nonverbal cues during and at the end of each conversation and the feedback sessions. This approach also served as an additional source of information which provided in-depth information for reflection.

To gain rich information and to avoid interruptions and distractions I chose venues that are quiet for them to feel comfortable in sharing their experience.

Researcher-Participant Relationships

In qualitative nursing research, conversation forms an essential part of information unravelling. My relationship with the participants was built on a healthy and mutual relationship with respect and equal opportunity as human beings and not my position as a health professional. In this way it was critical for me to adopt a conversation rather than a therapeutic relationship concerning their opinions and words without being judgemental. Every effort was made to establish an interactive and participatory discussion that helped to engage and encourage the women to share their narratives of their experiences openly.

Information Generation Techniques and Strategies

Information was gathered using phenomenological conversations of which I put aside between 40 to 90 minutes in length. Before the commencement of the phenomenological conversation permission was sought from the participants to tape record the conversation for the duration of the information generation process which they willingly agreed.

During the conversation a semi-structured phenomenological conversational prompt was used which consisted of keywords and prompts to help me stay focus on the phenomenological conversations. These also helped to reduce anxiety which helped the participants to share their experiences more openly.

Prior to conducting the first phenomenological conversation, I practiced an open-ended narrative conversation with two women who had been diagnosed as infertile. This helped in preparing for the actual phenomenological conversation in several ways, like how to use the audio recorder, practicing silence and handling disturbances.

I engaged the women in two separate phenomenological conversations, and feedback sessions with each participant over a period of 24-months. The long term engagement adopted allowed me to re-examine critical issues and deliberate on new areas of concern. Through multiple conversations I was able to gather comprehensive and quality information rich material from the participants' *lived-world*.

My continuous conversations with the participant enabled me to attain an increased understanding into the context of the phenomenon of interest. This long-term engagement appeared to improve the trusting relationship between myself and the participants. In doing so, I felt that this engagement offered an insight into the hidden *meaning* of the participant's *lived-world* (Anney, 2014). It was vital that I was and continued to be an active listener in both the phenomenological conversations and follow-up sessions.

All the participants were emotional during the conversations, and three of the participants became tearful when sharing their experiences. Out of the three participants who did not cry, one participant retorted ***'Vida, you made me very sad, but I am doing my very best not to be tearful'*****.** When the participants began to cry, I maintained a supportive and accepting stance while allowing the women space and opportunity to express their emotions using silence and minimal prompting. I was mindful of my presupposition, and I needed to remain focused and true to the phenomenon under study so not lose sight of the original purpose of the conversation. I also encouraged the participants to be as self-directed as possible in what and how to disclose**.**

I made every effort to avoid or minimise distress to the participants by continually reminding them throughout the conversations that they had the right to decline any answer to any question which they were not comfortable with. During the first conversation, one participant could not share her experience in the living room because she had her house help cooking in the kitchen and does not want her to hear the conversation. She asked me to lower my voice, and I could hardly hear what she was saying since she could not speak louder, so we eventually moved to her bedroom to start a fresh conversation. Another woman complained that she wanted the conversation to end as soon as possible as she was expecting a visitor. Again, another participant was very discrete when she was sharing her experience as she did not require her mother in-law to hear the conversation. She asked me to pause at the crucial point in the conversation when she sensed the mother in-law was coming around.

The phenomenological conversation as, well as the interpretive process, was a challenging exercise. During the phenomenological conversation as well as the feedback sessions some of the participants asked me to explain to them why the IVF treatment typically fails since they expected the doctors to explain it to them, but the doctors were not there for them. Others also perceived my visit to their homes as a means of supporting them regarding payment of IVF treatment. I could not offer any explanation and stressed that this could be done better by the fertility specialist. I also explained to them that the research is only for academic purpose and I was interested in learning from their experiences to inform IVF treatment practices. It was also very difficult to arrange for feedback sessions with many women due to the ever-changing schedules of fertility treatment.

Another challenge encountered was the usage of the audio recorder. It appeared that some of the participants were not comfortable and familiar with the audio recorder used in the phenomenological conversation and this made them self-conscious in responding. Initially, the participants seemed a bit hesitant, but they got used to the tape-recorder as the conversation proceeded as I encouraged them that there are no right or wrong answers. I also reassured them that they are obliged to refuse to give information which they are not comfortable with and that all the information provided will be self-confidence and not be disclosed to the public.

These concerns were approached with sensitivity and careful thoughtfulness to allay their misunderstandings; I always used the first five minutes to explain the objective and intention of the study further. All these issues were noted in my reflective journal and the effect considered during the interpretive process. These events also added richness to the information generated.

The final reflective conversations were mainly intended to allow participants to provide a reflective account of their IVF treatment journey.

Unravelling of the Phenomenological Conversations

The goal of information unravelling[15] in a phenomenological study is to provide a detailed description and rich information of the phenomenon of interest. The essence is to grasp the *meaning* of the lived experience (van Manen, 1990).

Max van Manen, a scholar who specialises in phenomenological research methods and pedagogy proposed six research activities to unravel information and/or material (narratives, anecdotes, reflections) of lived experiences. He asserts that phenomenology differs from other sciences in that phenomenological inquiry seeks to bring out the meaning of the study into play (van Manen, 1990). For this study, I have adopted van Manen's six steps of research activities as a structure to unravel the participants' phenomenological conversations. These activities or steps are as follows:

1. **Turning to a phenomenon of interest**

   Lived experience as explained by van Manen is the 'commencement and final point of phenomenological inquiry'- the aim is to breath meaning and interpretation into human experience (van Manen, 1990, p. 36).

   The participants and I have had our share of painful lived experiences with unsuccessful IVF treatment with the hope of having a child. This reflective emotion could best be explained and appropriated by Dilthey's proposition that lived experience involves our immediate, pre-reflective consciousness and only in thought does it become objective. Lived experience is the breathing of *meaning* into our soul. For instance, in our reflexive consciousness we hope for a child, and the child becomes an entity of hope. Dilthey further explained that a lived experience has a particular *essence*, a quality that we recognise in retrospect (Dilthey, 1985). This *essence* of lived experience lays within the transcribed phenomenological conversations (now referred to as narratives) for the participants and I. My interest of uncovering the *essence* of the study participant's *life-world* derives from the personal experience of unsuccessful IVF treatment.

   To be able to achieve in-depth *meaning* from these six motherless women and their shared lived experiences, I engaged with **Mavis, Juliet, Francisca, Akos, Lois** and **Isha's** narratives by highlighting sections of their transcribed phenomenological conversations and reflected

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[15] To investigate and solve and or explain something complicated or puzzling (Oxford Dictionary, 2018).

on these through a personal journal. In particular paying attention to their tone of voice and physical gestures such as facial expressions, periods of silence and even them being tearful so that the *essence* of *meaning* in their *lived-world* was captured.

2. **Investigating experience as we live it**

   As described by van Manen, this activity allows the researcher to connect with the original experience to uncover a deeper understanding of the phenomenon under study (activity 1 - (van Manen, 1990, p. 36). Information was gathered not only through the participants' phenomenological conversations, but also through writing, and observation.

   In staying true to Heidegger's philosophical tenets of *Dasein, being-in-the-world,* the three *existential* modes of *being* (*authenticity, inauthenticity,* and *undifferentiatedness*), and the care (*Sorge*) structure, I started to identify the naïve themes of the participants' experiences.

3. **Reflecting on essential themes of the phenomenon**

   Van Manen proposes that the most challenging aspect of phenomenological research is deciding whether a theme is essential to the phenomenon being studied. He further explains that to be able to grasp the *essence* of the *meaning* of a lived experience of a phenomenon there is a need for the researcher to thoughtfully reflect on 'what it is that offers a particular experience its distinct significance' (van Manen, 1990, p. 32). To make *meaning* of the transcribed narratives, I needed to reflect on the essential themes to enable me to grasp the *essence* of the lived experience. These themes gave the *meaning* of the phenomenon of interest. However, it was necessary in adhering to the Heidegger philosophical notions of the three existential of *Dasein* and *being*: *authenticity, inauthenticity,* and *undifferentiatedness*.

As suggested by van Manen, themes can be isolated from the participant's descriptions of experience by three different approaches which include:

1. The wholistic or sententious reading approach.
2. The selective or highlighting reading approach.
3. The detailed or line-by-line reading approach.

The first approach which is the wholistic or sententious reading, I viewed the transcribed phenomenological narrative as a whole and tried to uncover its *meaning*. As I was reading, I asked myself 'what sententious phrase may capture the essential *meaning* of the text as a whole?' and 'what does this sentence or cluster of sentences reveal about the phenomenon' (van Manen, 1990, p. 93).

In the selective reading which is the second approach is where it requires me to uncover the essential statements pertaining about the lived experienced of the participant's *being-in-the world.* I listened to the audio recordings several times and read the transcribed phenomenological conversation many times. As I was reading, I then highlighted and gathered statements or phrases that appeared to have significance to the phenomenon under investigation. The purpose was to grasp the essential *meaning* of the participants' lived experiences of unsuccessful IVF treatment as described by these motherless women.

The third approach required of me to scrutinise and analyse each sentence cluster. Again the transcripts were read and re-read line-by-line extrapolated to the participants (*Dasein*) lived experiences of *being-in-the–world* of motherless.

To grasp the essential *meaning* of their experiences under study, these three approaches were applied at different times and to different narratives during the unravelling of the phenomenological conversations.

4. Defining the phenomenon under investigation through the art of writing and re-writing

Van Manen proposes that to do phenomenological research is the 'bringing to speech of something' through writing (van Manen, 1990, p. 32). The art of writing and re-writing is an integral part of the research process. This means that through the process of writing and rewriting of the phenomenological conversations, *meaning* is revealed.

Using a digital audio recorder, the phenomenological conversations were captured and transcribed verbatim as soon as I was able. This usually happened within two to three days after. Following each audiotaped conversation, I started to transcribe the recorded conversation verbatim. This was achieved through the process of writing, reading and reflecting on the experience as described by the participants to engage with the transcribed narrative. It was not easy to formulate the lived experience thematic statements straightaway. This process also required that I go back and forth to read a phenomenological conversation text several times; writing, checking, being mindful upon my choice of words, and re-writing to ensure that I had captured the *essence* of *meaning* provided by the study participants.

Then, after re-reading the transcript, all the information which was not relevant to the phenomenon of interest was deleted from the phenomenological conversation transcript. The transcribed conversations were returned to the participants for them to confirm if the narratives resonate with their own experience. After the participants had confirmed that each transcribed narrative was an accurate account of their personal experience, I then went ahead to make the preliminary interpretation.

These processes enabled me to obtain an overall understanding of the phenomenological transcribed conversation to which *meaning* of the participants lived experience were revealed. The 'naïve' themes that pertained directly to the participant's lived experience were isolated using van Manen's selective reading method. Once the themes have been identified, they then become *entities* of reflecting and interpreting through follow-up conversation with the participants. The participants at this point will then become coresearchers by validating the lived experience themes identified. The isolated naive themes were then presented to the participants for feedback for authentication and validation.

To attain the conceptual relevant information a sequence of translation techniques were employed. Firstly, the content of the phenomenological conversations and observation documents were transcribed verbatim in Twi[16]. I then transcribed the Twi version into English. To ensure the accuracy of the translation, my translated English transcripts were given to an independent bilingual person to translate back into Twi. These two versions were then compared to determine the accuracy of the translation of the original transcripts. The intent was to capture the similarities of the phenomenological conversations. This practice is referred to as back translation (Maes, Wang, Van den Noortgate, & Goossens, 2016). The final English translated conversations were used to identify the emerging themes from the participant's narratives which informed the hermeneutic interpretive process.

5. Maintaining a strong and oriented relation to the phenomenon

Van Manen suggests that in order not to lose focus of the study, the researcher should remain oriented to the research question of the phenomenon under study. To be oriented in the study, I made every effort to stay focused when analysing the information by continually referring back to the research question to avoid 'superficialities and falsities' as described by van Manen (van Manen, 1990, p. 33).

The lived experience themes identified were then used during the interpretation stage to assist in the selection of the relevant quotes from the participant's transcribed phenomenological narratives.

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[16] **Twi** (pronounced [tɕɥi], or **Akan** (Kasa) is a dialect of the **Akan** language spoken in southern and central Ghana by about 6–9 million Ashanti people as a first and second language.

6. Balancing the research context by considering parts and whole of the Phenomenon

In this final stage of the research process, van Manen advocates that there is the possibility of the researcher losing sight of the phenomenon being studied and can get stuck in the information consequently losing its *meaning*.

To be better able to grasp the lived experience themes from the phenomenological conversation, the participant's narratives were carefully examined and considered in the context of their *life-worlds* to capture the *essence* of the phenomenon wholly. To remain truthful (*authenticity*) and focused with the participant's unique narratives and context at the end of the phenomenological study I needed to continually measure the whole text by examining the narratives simultaneously with the emerging themes. In this study, the motherless women's experiences of an unfulfilled wish of becoming mothers through IVF treatment were regarded as part of a temporally unified whole that shaped by their *Dasein*.

Since *meaning* is rooted in the participant's narratives, my task was to uncover and make these *meanings* explicit. To move further into the participant's *life-world,* through a cycle of writing, re-writing and reflecting on the text I was able to develop a more profound understanding of the whole transcribed material.

Heidegger explained that, deciding to do research begins with a concern about something that interests us most and therefore drives us to commitment. From my perspective, I was also interested in gaining an understanding of the *meaning* women who were not successful in IVF treatment holds for them in their *existence* in the world.

Heidegger asserts that to understand the *meaning* of a conversational text we need to understand the *meaning* of its parts. However, we can only understand its parts by anticipating the *meaning* of the text. Heidegger explained that we always approach phenomenon with *fore-having a priori* understanding of a phenomenon and *fore conception* the idea that we bring to a study provides a basis of our understanding of the phenomenon under investigation (Heidegger, 1996).

The interpretation and formulation of the lived experience themes were also informed by my understanding drawn from my life experience to make sense of the *meaning* inherent in the participant’s narratives. It was my background experience that enabled my presuppositions and helped me to see beyond what the participants said during the conversation. I was also mindful and remained open to the participant’s lived experience to avoid reaching a premature understanding of the phenomenon being studied.

I made every effort to balance the research context by considering parts and whole by continually scrutinising the participant’s *life-world* and moving between parts of the phenomenological conversational text with that of the experience being shared.

I considered the phenomenological conversations and participant feedback complete when no newer lived experience themes emerged.

Utilising van Manen's six research steps to unravel the experiences of motherless women's stories of unsuccessful IVF treatment and keeping to Heidegger's phenomenon the following lived experience themes emerged:

Heidegger's 3 Modes of *being*	Lived Experiences' Phenomenological Themes
Authenticity **(*mine-self*)**	**Seeking wholistic and *authentic* care (*Sorge, Dasein*)** • *being* concerned with the *authentic self* • *being* cared for and supported • encounters with the IVF service *entities*
Inauthenticity **(*they-self*)**	**Facing up to the *Angst* (*Angst,* [*Verfallen*] fallenness)** • *Angst* of uncertainty • experiencing existential faith and hope • guilt and self-blame • non-disclosedness **The vulnerable self (The *they* self [*das Man*]), *thrownness,* [*Verfallen*] fallenness)** • painful experiences • loss of *being-it-self-in-the-world* • sense of grief and profound loss
***Undifferentiated everydayness of* (*being-in-the-world*)**	**Living with infertility (*being-in-the-world-of-motherless*)** • disruption in projected course of life • being an outcast *in-the-world-of-motherhood* • reality acceptance of *being-in-the-world-of-motherless*

Table 4: LIVED EXPERIENCE THEMES

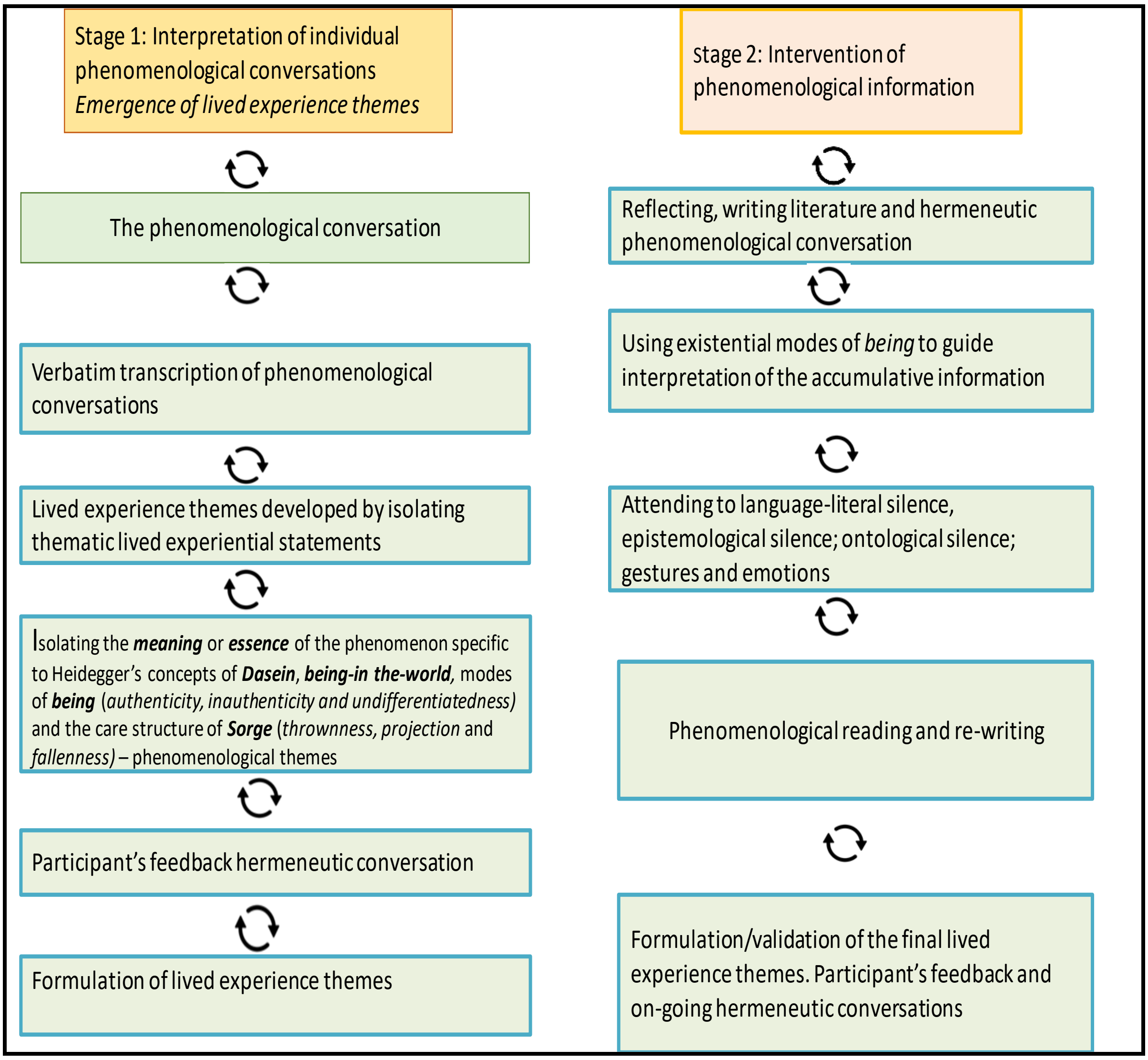

Figure 2: A glimpse of the diagrammatic representation of the hermeneutic phenomenological interpretive Process

The hermeneutic phenomenological interpretive Process is always in motion not in a linear fashion but iterative always backward and forward movement.

Expressions of Rigour

It has been established that there is divergence views within the nursing literature concerning which criteria is suitable and consistent to assess the quality and adequacy of trustworthiness in phenomenological research (Annells, 1999; Koch, 1996; Maggs-Rapport, 2001; Whitehead, 2004).

De Witt and Ploeg recommend that adoption of appropriate criteria in establishing trustworthiness in phenomenological inquiry in nursing may be helpful in maintaining the legitimacy in the research process. To ensure trustworthiness of this study, I focused on the proposed framework of expressions of rigour detailed by de Witt and Ploeg and van Manen in hermeneutical phenomenological research (De Witt & Ploeg, 2006). These are: balanced integration, openness, concreteness, resonance and actualisation.

Criteria/Expression of Rigour	Defining characteristics of Expression	Applicability to the Study
Balanced integration	The articulation of philosophical principles in relation to the phenomenon under study, the methodological approach used and balance of participants' voices	Philosophical underpinning of the study and its application to the findings described. The participant's voices, that of the participants and philosophical method give voice to the lived experience
Openness	Openness of the study to scrutiny. decisions made throughout study	My presupposition and pre-understanding during the interpretive process of the study stated clearly. Journal entry made to sum up my stance, feelings and emotions
Concreteness	Usefulness of the study findings for clinical practice	The study contribution and the implications to field of nursing and its limitations discussed.
Resonance	Richness, reverberation	Acknowledged at conference presentations
Actualisation	Phenomenological clarification does not end after completion of study-future reverberation of findings is critical	Future opportunities and description of the study.

Table 5: Expression of Rigour and its Application to the Hermeneutic Study (De Witt & Ploeg, 2006, p. 224)

In keeping with De Witt and Ploeg (2006) and van Manen's (1990) suggestion of idea of trustworthiness, I have provided examples and explain the proposed expressions of rigour.

Balanced Integration

The first expression proposed by de Witt and Ploeg (2006) is balanced integration. There are three distinctive features of balanced integration. Firstly, as suggested by de Witt and Ploeg, it is essential that the general philosophical concepts are well delivered and stated clearly to connect with the phenomenon under investigation.

Using Heidegger's hermeneutic philosophy of *being and life-world* fits well and is deemed appropriate in this study as it is consistent with the research objective. The study sought to interpret and uncover hidden meaning of the lived experience of women facing fertility problems and seeking IVF treatment but the procedure was not successful.

Heidegger's notion of *Dasein* means to *be there*, the way human beings exist and live in the world (Inwood, 2000a). *Dasein's* *being-in-the-world,* involves a relationship between being human and our present in the world as such human beings cannot live as a separate entities in their world but incessantly establish therapeutic relationship with one another (Holloway & Wheeler, 2010).

Again balance integration includes a detailed characteristics of how the philosophical ideas are interwoven with the study's methodological approach and findings, thereby achieving a sense of balance between the voice of the participants and the philosophical description of their lived experience (De Witt & Ploeg, 2006). In this study, I focused and discussed Heidegger's concepts of *Dasein* (*being there), modes of being (authenticity, inauthenticity and undifferentiatedness)* as well as the care structure of *Sorge* (*thrownness, projection* and *fallenness*).

As I proceeded through the unravelling of the women's lived experiences, I strived to identify central tenets of the philosophy of Heidegger that interconnected with the interpretation of the motherless lived experience. I endeavoured to intertwine Heidegger's philosophical concept of *Dasein* (*being there*) with that of the women's *life-world* in unravelling the information from the women's phenomenological conversations and during the feedback sessions whilst being mindful not to detract from the study context during interpretation of the phenomenological text.

An example

Juliet was 29 years old at the time of our first conversation. She is a professional nurse and had never been pregnant before. She was diagnosed with infertility as a result of polycystic ovarian syndrome (PCOS) a hormonal disorder. Her first IVF attempt failed, and she was preparing for her second IVF treatment when I met her for the first phenomenological conversation. During our second conversation, she had had her second IVF treatment cycle but unfortunately it was not successful. Juliet and her husband were planning to consider another treatment at an appropriate time.

'Left to me alone, I could not have been able to survive with this stressful life situation, but my husband supported me. Irrespective of the circumstances he was very supportive. He is always there for me. He gives me words of encouragement [smiling]. *He tells me Juliet it shall be well even after the reviews he asks me about the progress of it. I will explain everything to him, so he was abreast with everything. He knew what was going on and he was there for me. He also reads a lot about it so whenever I inform him about anything pertaining to it he understands easily.'*

To achieve a careful balance between the voice of the women and the philosophical description, I was mindful of my own pre-understanding and lived experience with that of the women's description during the phenomenological conversation paying attention to Heidegger's philosophical tenets.

Openness

Openness is the second step of the proposed expressions of rigour. Openness and balanced integration criteria reflect the study procedures (De Witt & Ploeg, 2006). This is where the study is opening to scrutiny during the research interpretive process to bring into harmony the phenomenon of interest. To become entangled with the study process every effort was made to ensure openness by stating my presupposition and pre-understanding during the interpretive process of the study.

Journal Entry Saturday, 27th August 2016

'I am very much cautious about my conversation with Francisca later this afternoon. She was told by the doctor that the IVF treatment had been unsuccessful after undertaking the ultrasound scan. She was very anxious and depressed yesterday when I contacted her concerning the study. Although she agreed to participate in the study and suggested we meet tomorrow at her house, I am anxious about the session as I anticipate she will be teary and emotional during the conversation. I know I have to stay true to the researcher's roles and responsibility but I feel that this will be difficult as my personal experiences with failed IVF treatment and my background as a nurse my awaken in me the desire to reach out to her in comfort'.

In keeping with this, I ensured that openness was adopted and sustained by being mindful of the phenomenological conversations knowing how much anxiety it may cause for the participants. I had to remain focused and true to the phenomenon to bring harmony into the research process. Keeping a reflexive journal prior to each conversation and feedback sessions also helped me to stay focused and true to the phenomenon of interest.

Concreteness

This is to ensure that the findings of the study have been written clearly and the researcher gives concrete example to authenticate the study context in a way that the reader develops a real understanding of the phenomenon being studied. Max van Manen (1990) suggests that readers may recognise concreteness when study findings are written in a way that examples are provided to place the reader concretely in the context of the researched phenomenon in connection with the experiences of their own *life-world*. Van Manen referred to concreteness as *life-world* where the reader connects specific features of interpretive phenomenological text to their everyday life. He describes this expression of *meaning* ‘lived throughness’ (van Manen, 1997, p. 351).

An example

In a strong pronatal backgrounds which advocate high birth rate, the desire to have children and become parents is a basic one. In a society that values fertility, women who are infertile may bear an immense social stigma and this can lead to great suffering and economic hardship, especially for women. These motherless may also experience loneliness and isolate themselves at social get-togethers children are the focus. They prefer to keep their problems to themselves may not be willing to share their grief. Women who are motherless often grieve alone as they fear that other people who are not in similar situations will not understand their feelings **[experience in the reader’s *life-world* if the reader is motherless]**. *Many women who are infertile resort to IVF treatment with the hope of having their own biological child and there is the possibility that the treatment may not be successful* **[experience in the reader’s *life-world* if the motherless has resorted to IVF treatment]**. *Undergoing IVF treatment is stressful and when the treatment fails it may leave women feeling devastating and disappointed in life* [**context of the phenomenon**].

Lois shares her experience:

Lois was 40 years of age at the time of our first conversation. She is a trained high school teacher and has been married for 12 years of which she has been infertile for 11 years. Her source of her infertility was unknown (Unexplained infertility). Lois shared her bitterness as she married as a virgin, it never crossed her mind of ever experiencing problems with conception. She said she did not have the least idea that she will ever encounter problems of fallen pregnant in her life. Lois visited many fertility clinics and had done several fertility tests and diagnostic investigations of which the cause of her infertility could not be revealed. She has experienced two previous miscarriages and since then has been receiving infertility treatment without any success. She had experienced a total of four unsuccessful IVF treatments cycles when I met her. Lois is disappointed and has lost hope. It appears she has given up on the idea of having her own biological child and is in a phase of grief and mourning.

'In the beginning I had a strong spiritual conviction but after the unsuccessful treatment, it became weak. What saddened me was that I was a virgin when I got married, and I have been trying to fall pregnant for twelve good years but to no avail till I got pregnant last year and lost it in the third month. Then I went for this IVF treatment hoping that with all this numerous and painful injections and luteal support all will be well. And then I have prayed to God for all this while, thinking that God is going to help me but that was not the case. It was like [sad, paused for a while] *if it was negative at the beginning it would not have been a problem, but to think that the test was positive and God could not help carry it to term, the pregnancy couldn't develop to term I started to ask God why He has allowed me to go through this kind of suffering. All my life I have not committed any abortions nor committed any sin that is grave. I know everybody sins but I don't think I have done anything devastating to go through this kind of situation.'* **…. Lois.**

Strategies such as member checking, prolonged engagement in the setting, peer review, and debriefing were also used to assist in ensuring concreteness.

Resonance

This framework proposed by de Witt and Ploeg explains how well the reader integrate meaning into the study findings and after effect of the outcome. The aim of the current study is to reveal in depth *meaning* of the women's lived experience; allowing the reader to encounter a resonate association with the study findings.

This example was given by **Francisca**, following one of her feedback session regarding preliminary report of the study findings.

'Vida, I have gone through the narrative and I find it to be interesting, and I am happy. I think the meaning of our experiences have been incredibly captured. I am so happy that you are doing this research because it will really help us a lot. Many people are less aware about it and have less ability to accept such treatments because of several misconceptions and beliefs.' …. **Francisca.**

Actualisation

Actualisation refers to the future opportunities of the participants' phenomenological interpretation and how the interpretation commensurate with the study findings. When the study is completed it does not mean that the outcome of the Phenomenological interpretation has also come to end but rather the study will continually be reviewed and interpreted by readers in the future. This future realisation may offer a reliable opportunity of the study outcome as explained by De Witt and Ploeg (2006).

The interpretation of the participants' transcript was considered to be complete when no newer themes emerged.

Summary

In this chapter I have describe the methodology and the research method utilised in the study. The study used a qualitative research method and philosophy of Heidegger's hermeneutic interpretive phenomenology to explore the phenomenon understudy. Information was generated using in-depth phenomenological conversations to unravel the participant's lived experiences. Max van Manen's six steps of research activities as a structure to unravel the participants' phenomenological conversations were used. The research process and the way interpretations emerged have also been discussed.

Finally, various measures that were used to address the concerns of credibility and precision during the research process stated clearly.

CHAPTER FIVE

The Phenomenological Conversation and Unravelling of the Phenomenological Themes

Introduction

This chapter, describes the lived experience themes that emerged from the unravelling of the participant's phenomenological conversations of their experiences of unsuccessful IVF treatment in their pursuit of motherhood. Verbatim accounts are presented to validate the study findings. The intention is to offer the reader to gain a deeper meaning and insight into the participant's lived-world of unsuccessful IVF treatment.

Description of the Phenomenological Themes

There were **four lived experience themes** that emerged from the women's phenomenological conversations. The themes are described in relation with Heidegger's concepts of *Dasein,* the care (*Sorge*) structure *and* the three *existential modes of being: (Authenticity, Inauthenticity* and *undifferentiatedness)*.

The sub-themes and the main themes that recognised from the information gathered from the motherless phenomenological conversations and the hermeneutic interpretation are outlined in table five below:

Heidegger's 3 Modes of *being*	Lived Experiences' Phenomenological Themes
Authenticity **(*mine-self*)**	**Seeking wholistic and *authentic* care (*Sorge, Dasein*)** - *being* concerned with the *authentic self* - *being* cared for and supported - encounters with the IVF service *entities*
Inauthenticity **(*they-self*)**	**Facing up to the *Angst* (*Angst,* [*Verfallen*] fallenness)** - *Angst* of uncertainty - experiencing existential faith and hope - guilt and self-blame - non-disclosedness **The vulnerable self (The *they* self [*das Man*]), *thrownness,* [*Verfallen*] fallenness)** - painful experiences - loss of *being-it-self-in-the-world* - sense of grief and profound loss
***Undifferentiated everydayness of* (*being-in-the-world*)**	**Living with infertility (*being-in-the-world-of-motherless*)** - disruption in projected course of life - being an outcast *in-the-world-of-motherhood* - reality acceptance of *being-in-the-world-of-motherless*

Table 6: **The Modes of *being* and the Lived Experience Themes**

Mode of *being - Authenticity*

Major Lived Experience Theme-Seeking Wholistic and *Authentic* Care (*Sorge, Dasein*)

This section explores the lived experience theme of the motherless seeking wholistic and *authentic* care. Heidegger's philosophical tenet is care *(Sorge)* as it concerns our human *existence* in the world (Inwood, 2000a; Wrathall, 2013). Caring is an integral part of interpreting the world and it is an important concept of nursing. Nursing is caring as our existence in the world is shaped with care. It is showing concern for and interest in the person being cared for. An essential element of wholistic nursing is caring for individual well-being.

Heidegger asserts that as individuals we are aware of and understand how we exist (*Existenze*) *in-the-world* and as human beings we are inseparable *entity* but beings that are always interacting in their *life-world* which is shaped by societal norms. He states that as an in *authentic* human being *(mine-self)*, our human identity (*Dasein)* understands its existence in term of human relationships and how we make sense of *being-in-the-world* (Wrathall, 2013). In relation to the context of women in this study, the *Dasein* of the motherless and how they engage with the IVF carers*.* In trying to find answers to their infertile world, the women *authentically* entered the world of ART and wholly committed to the recommended routines of the IVF treatment process in order to become part of the mother world. It is through seeking wholistic *authentic* care *(Sorge)* that *Dasein* becomes aware of the many challenges in their life such as going through intrusive and torturous yet experiencing unsuccessful IVF treatment.

The women were concern to have a family to care for that is why they entered the IVF treatment journey with the wish to have a baby to care for because to care is to be concerned for someone or something (*Sorge*). Care (*Sorge*) for Heidegger is critical concept as *Dasein* make meaning of our *being-in-the-world* in human relations and being serous *in-the-world*.

The three emergent sub-themes from the participant's information unravelling in respect of the wholistic care they wished to receive from the IVF carers in the IVF treatment journey are: (i) '*being* concerned with the *authentic self*'; (ii) '*being* cared for and supported' and (iii) 'encounters with IVF service *entities*' (See Figure: 3. below).

Figure 3: Thematic Engagement of the Relationship of the Sub-themes of the Lived Experience Theme: Seeking Wholistic and *Authentic* Care (*Dasein, Sorge*)

Sub-theme: *being* Concerned with the *Authentic Self*

Under the theme of **seeking wholistic and *authentic* care**, the sub-theme of *being* concerned with the *authentic self* was identified. Heidegger assert that *Dasein's* primary *existential* occurrence in the world is to show concern and care. The category of *being* concerned with the *authentic self*-revealed that for the participants the desire for a child was so important and that was what drove them to be involved in IVF treatment. The motherless being *authentic* decided to make a meaningful choice to seek IVF treatment despite the many challenges with the hope of belonging to the mother world (*authentic existence* (*Existenze*). For these women, having acknowledged as being infertile (*authentic self*), they then chose IVF treatment to fulfil their dream for motherhood (*authentic self*).

The women had to sacrifice their whole being and making difficult choices by entering the world of ART and taken responsibility of their *being-in-the-world of motherless* (*authentic existence* (*Existenze*) mode) rather than remaining in an *inauthentic mode of human existence* where life goes on smoothly in advance. The women took a bold decision to seek fertility care to change their identity of *being* in the infertile world (*authentic self)*.

When the women started the treatment procedure each of them gave up everything by making her own adjustment out of their busy schedules in attempt to settle into the mode of *being* in IVF treatment. Each of the women acted resolutely and *comported* themselves when receiving the treatment (*authentic self*) by strictly adhering to the treatment regimen. As Heidegger stated we are constantly *comporting* to something as we demonstrate our *being-in-the-world* (Heidegger, 1996). The motherless were determine to have their own children when they entered the world of ART, they gave up their self-identity as a healthy adult (authentic self). They had to adjust to an IVF environment that treated them as a patient and follow through with the procedure despite the suffering imposed by the treatment schedules.

Francisca was 32 years of age at the time of the first conversation. She works as an insurance broker and married for five years and had been experiencing infertility treatment for four years. The cause of **Francisca's** problem was due to tubal blockage and uterine fibroids. She had a myomectomy done in 2017. **Francisca's** first phenomenological conversation occurred two days after she had been told by her doctor that her IVF treatment was not successful as diagnosed by an ultra-scan examination. Her first and second IVF treatment failed, and she was saving money to do a third IVF treatment. Despite the disappointment, the couple decided to undergo a third IVF cycle until it was successful.

For the sake of having a baby **Francisca** endured a protracted and troublesome IVF experience, resulting in adverse effects of the drugs. She recalled her painful experience:

'The injection was very painful. As a very fair person, the injections discoloured the fair skin on my buttocks and sitting down became a problem, so I mostly slept on my side because of the pain. It is very painful; I sometimes feel weak and lost appetite, I feel pains in my breast, and the injection too was painful because I needed a child, I had to sustain all these tortures.' …. **Francisca.**

Juliet was 29 years old at the time of our first conversation. She is a professional nurse and had never been pregnant before. She was diagnosed with infertility as a result of polycystic ovarian syndrome (PCOS) a hormonal disorder. Her first IVF attempt failed, and she was preparing for her second IVF treatment when I met her for the first phenomenological conversation. During our second conversation in 2017, she had had her second IVF treatment cycle but unfortunately it was not successful. **Juliet** and her husband were planning to consider another treatment at an appropriate time.

Attuned to the IVF process**,** **Juliet** describes the procedure as a necessary evil, but she had to endure for the sake of motherhood:

'The most painful aspect is the injections, it is very painful; every day you will take the injections, even after the transfer you will continue with the injections for luteal support. If you don't compromise the foetus will not survive, it is a necessary evil but you have to do it since you don't have any option. Even taking the pills is not easy, the side effects of the drugs later, all these things if I think about it, it is very painful but since I needed a child I had to endure.' …. **Juliet**.

The participants showed concern for themselves (*authentic self*), underwent IVF medical treatment and managed their physical and emotional pain, postponing self-gratification and re-organised their work schedules and family lives for the sake of having a child. Several of the motherless described the IVF journey as stressful and painful experience. Being *authentic and remaining true to the IVF experience* was not easy to go by as their commitment was severely tested due to the tedious and torturous nature of the procedure; nevertheless, they were consoled by the fact that they were not suffering in vain other than to have a child.

Akos was 35 years old at the time of our first conversation. She works in a bank. She is a Christian and married for six years. She was diagnosed with infertility as a result of tubal blockage with recurring uterine fibroids in 2013. She underwent surgical operation (myomectomy) to remove the fibroids in 2016. Her first IVF treatment was not successful. At the time of our second conversation, she had undergone a second IVF treatment cycle but unfortunately this also failed. **Akos** was considering trying for another cycle but due to financial constraints this has been put on hold.

The women entered the world of IVF treatment with the wish of having a child and make sense of their *existence* (*Existenze*), though they were uncertain that this optimism may be fruitful. For Heidegger *being* true and showing concern to oneself and taking responsibility of a problem is being *authentic* as expressed in **Akos** words:

'I had to try many avenues but all to no avail so my mother advised me to go for the IVF treatment as she has heard that people receive the IVF treatment and are successful, so I decided to give it a try. I visited the hospital again in 2016 with a firm decision to undergo the IVF treatment because I understood that life is about taking risk and I was ready for the treatment though I had done some research which informed me that the IVF is not 100% successful but I found no reason why I will not be one of them who are successful.' …. **Akos**.

Francisca offered her whole self (*Dasein*) and endure the IVF treatment to achieve her wish of a dreamed child:

'Initially I was very happy because the IVF treatment will give me a chance of becoming a mother. I can also carry my own baby, so I had high expectation and offered my whole life to undergo the treatment despite the suffering.' …. **Francisca.**

Juliet remained *authentically* committed to the IVF experience and follow through with the recommended routines and advice provided by her IVF carers to fulfill a dream of a child:

'IVF treatment is time consuming and painful but because you need a child you will have to compromise and remain faithful with the tedious IVF treatment like taken the injections daily for two weeks, following routine schedules etc. It was not easy but the hope of getting a baby motivated me to do all I can such as taking numerous injections and paying such a huge amount and making time for the treatment despite my busy schedules.' …. **Juliet**.

Our initial conversation started in 2016 at that time, **Mavis** was 40 years old. She was diagnosed as having fallopian tube blockage. **Mavis** had started seeking treatment ten years back and had sought low technological treatments such as fertility drugs, IUI and herbal medicinal cures but all to no avail in the previous years, before she was advised by her doctor to seek with IVF treatment. Unfortunately, she has experienced five failed IVF treatment cycle when I met her. She was considering another IVF treatment but due to financial and time constraints she wants to hold on for a while until she is better prepared. **Mavis'** first marriage did not work out. The union dissolution was caused by childlessness. She remarried and is currently living with her husband who has a son and has completed senior high school. **Mavis** and her husband were determined in pursuing with IVF treatment notwithstanding the many unsuccessful treatment cycles.

Making the decision to seek IVF treatment was ultimately described as a personal choice, deciding with her partner albeit within a closed family situation. In my conversations with the women about their experiences of their own decision-making processes, **Mavis** had this to say:

'My father has stayed in the US for a while and he knew about IVF so he suggested that I should make inquiry as to what is involved so I went to the hospital around 2014. My doctor also recommended that I should go in for IVF and so he directed me to where they are (Rumah Fertility Hospital), I did a follow up and went to see the specialist. A customer also suggested I should go to Ruma Fertility Clinic instead of travelling all the way to Tema, rather this place was closer and so my husband and I came here in 2014.' …. **Mavis.**

She continues her story:

'I first discussed it with my husband and he also agreed so we took a firm decision. We came to see the doctor and he [The doctor] *requested series of laboratory investigations to be done.'* …. **Mavis.**

Akos had this to say:

'It was a firm decision. I made the decision with my husband. like I said earlier, I mentioned that my mother influenced me and told me that some people had done the IVF and it turned out successful for them so I should also give it a try so that is what encouraged me to do the IVF.' …. **Akos**.

Francisca shares her idea:

'My doctor, Dr Asante Mante [used with permission] *recommended IVF to me. Later when I was referred to another doctor* [Dr Amenya, used with permission] *he also suggested IVF treatment to me. Again, when I went to see the specialist at the Ruma Fertility Clinic he said with my issue because it was a tube blocking, the doctor told me that IVF was the only option. My husband and I planned to do it, so we prepared for it. I became involved with the desire to carry by own baby. Initially I was very happy because the IVF treatment will give me a chance of becoming a mother. I can also carry my own baby, so I had high expectation and offered my whole life to undergo the treatment despite the suffering.'* …. **Francisca**.

All the women expressed that they were not interested in adopting a child as they believe that giving birth will change their societal status and improve their life expectations and societal perception towards childbearing.

Lois states:

*'I did not like adoption either because I want to carry my own baby in my womb so that I can breastfeed my own baby that was all that I was looking for. I wanted the IVF. I didn't want to adopt.'***…. Lois.**

Mavis stated:

'*In Africa once you are married you have to give birth. If you don't give birth, it is a whole lot of issues In the Ghanaian culture, motherhood is perceived as an important social role for women*.' **…. Mavis**.

Mavis gave the reason why she did not want to adopt:

'My husband and I were not particularly keen on adoption. People talk too much in our society. Whatever you do people will talk about it so I for one I'm not interested in adoption. I wanted to be pregnant and carry my own baby that is why I sacrificed for this treatment.' **…. Mavis.**

Akos stated:

'I had high expectation that the IVF treatment will give me a chance of becoming a mother. This also will change societal perception towards being infertile.' …. **Akos**

Sub-theme: *being* Cared for and Supported

A sub-theme of *being* cared for and supported was also identified under the theme of *'*seeking wholistic and *authentic* care*.'* Providing care to the whole person is a basic concept of professional nurses**.** For these participants *being* cared for, means to receive something in the caring mode that the women have anticipated and yearned for. Most of the women felt supported *authentically*, emotionally and financially particularly from their husbands, families and others.

Juliet explains how her husband has been there for her during and after the IVF treatment:

'Left to me alone, I would not been able to survive with this stressful condition, but my husband supported me. Irrespective of the circumstances he was very supportive. He is always there for me. He gives me words of encouragement [smiling]. *He tells me Juliet; it shall be well even after the reviews he asks me about the progress of it. I will explain everything to him, so he was in touch with everything. He knew what was going on and he was there for me. He also reads a lot about it so whenever I inform him about anything pertaining to it, he understands easily.'* …. **Juliet.**

Her story unfolds further:

'He has been supportive throughout, financially he supported me, emotionally he encouraged me and educationally too he has been supportive. At times he reads about the procedure and teaches me certain things concerning the procedure, so he has been there throughout, he is good actually. It is not all men who would be able to offer such help by giving his full support as he did for me. I appreciate it very much. In fact, He has been my world. During the procedure too he sometimes accompanies me to the clinic; He wanted to know what was going on, so that he also had a feel of it. Any question bothering him he will ask the doctors and then they will explain it him. He also asked the doctor questions about the procedure. He has done well. After the procedure too he was there, we came together for the result; when it came out negative it was a big blow for both of us. When I went home, I cried, and he consoled me.' **…. Juliet**.

She continues:

'The family members of my husband are supportive, especially my husband's older brother and mother in-law. They don't even talk about my problem. My mother in-law always prays about it for me. She sometimes takes me to see her prayer counsellor; then she will say, Juliet it shall be well' …. **Juliet.**

Lois was 40 years of age at the time of our first conversation. She is a trained high school teacher and she got married for twelve years earlier of which she has been infertile for eleven years. Her source of her infertility was unknown (unexplained infertility). **Lois** told me she was a virgin when she got married she was very surprised to have experiencing problems with conception. **Lois** has done several fertility tests and investigations which results found no cause for her source of her infertility. She has experienced two previous miscarriages and since then has been receiving infertility treatment without any success. Unfortunately, **Lois** has experienced a total of four failed IVF treatments cycles when I met her. **Lois** is disappointed and has lost hope. It appears she has given up on the idea of having her own biological child and is in a phase of grief and mourning.

Lois also shares similar experience:

'As I said earlier, he helped financially. He helped a lot with finances. Also, in relation to all that he had to offer for the success of the process he did his best with all his busy schedules. He went through all the laboratory investigations requested. He provided his semen and other things that were needed. Again, he encouraged me a lot and was very supportive. He encouraged me a lot by letting me know that he was in support of the whole idea of the IVF treatment and I have someone who cares. He told me that I should leave everything in the hands of God, whether it will be successful or not. Whatever the outcome we should accept it in good faith. This gave me an assurance that there was no need to worry. He was there for me. He usually comes to visit on weekends, or I go there to be with him if he is not able to come. Whenever I visit the hospital he will call and asked about what the doctor said and the next step to take.' …. **Lois**.

She continues her story:

'My sister also helped me a lot. During the process it was my sister who was taking care of me as my husband was mostly not around since he is working at Takoradi [Western region of Ghana].' …. **Lois.**

Francisca explained that her husband and family *authentically* supportive behaviour has favourably contributed to her IVF treatment journey:

'Yes, even the decision for the IVF treatment was suggested by my husband. I was initially reluctant, but he encouraged me to go in for it since it was my only option. He helped with cooking and most of the domestic chores. Genuinely, He was very caring, staying with me at the hospital and financially he was 100% supportive. My family sometimes call to ask and try to offer solutions. We have a family who support and encourage us we that we should remain focus and not let the issue of childlessness distract us.' …. **Francisca.**

Akos recounts that her husband was *authentically there* for her during and after the treatment process:

'Yes. My husband supported me a lot. Firstly, he helped financially and, he was the one that always drove me to the hospital when there is need to come to the hospital and then he will drove me back home. He encouraged me a lot on looking at the bright side even when we got to know that it was not 100%. He helped by being positive throughout. My relationship with my husband has not changed. From the beginning he was supportive, he encouraged me, and it has not changed. He has been the same from the beginning till now. We are still as we were. It has not separated us or changed his mind about me. After the IVF, his attitude has not changed. He rather encourages me that there are more opportunities in the future. In relation to sexuality, it is still as before. It has not changed.' **…. Akos.**

I asked **Juliet** about her husband's attitude towards her after the unsuccessful IVF treatment:

'Honestly, his attitude up till now is just normal as we got married earlier on. He believes that it's God who gives children and that man cannot do anything about it. A child is a blessing from God if He has not given it to, you just must wait for God's own appointed time. So as for his attitude it's perfect. He understands my condition and the pains I'm going through. He feels for me like going through all the complex nature of the treatment. I am forcing, it is not that I am sitting there idle doing nothing. When the procedure was not successful, he did not bother me. Our relationship became more strengthened because he didn't want to add more stress because he knows the way I am. Sine I can't cope with stressful situations like the stress of having a negative result, it will disturb me so those are the periods he showed more love so as not to aggravate the situation. He even used to create jokes for me to laugh.' **…. Juliet.**

Unfortunately, **Francisca** did not share the same view about her husband's attitude after the failed IVF treatment. She had a different opinion:

'In the beginning, we all had hoped that it would be successful. My husband is a very outgoing person. He likes to meet with his friends and hang out. When I started with the process he stopped going out and was always by my side. But when I lost the pregnancy, he lost hope. He was not happy seeing me again. Looking at how our relationship was from the beginning; it has deteriorated now.

We are still friends …. He started to question God on why he was going through such predicament. As a young man why is he going through this kind of problem? His attitude before and after the IVF treatment has changed.' **…. Francisca**.

Sub-theme: Encounters with the IVF Service *Entities*

This sub-theme describes the women's encounters with the healthcare service delivery and the way in which the healthcare professionals dealt with the IVF users during the process of IVF treatment. Heidegger describes our *being-the-world* in relations of the *entities* within it, and how *Dasein* relates to these substances around them. For Heidegger as human beings in the world, we have perception about how we understand and view these *entities* in our existence through our *lived-world*. In the context of this study these *entities within the world* included fertility health services as an institution and other *Dasein,* that is, the healthcare professionals who provide IVF services. As such, nurses play a key role within the world of fertility health services by ensuring that women receiving IVF services are well cared for.

The phenomenological interpretive process revealed both positive (*authentic*) and negative (*inauthentic*) encounters with the healthcare professionals.

A few of the participants described how some of the nurses give of themselves in the encounter with them by showing respect and an openness in attending to their needs. This revealed exposure to a *ready-to-hand* service *entity* that supported these women care structure in receiving a supportive, effective services throughout the process. In general, the participants' described the personal treatment received as therapeutic which is based on mutual respect and professional care that brought feelings hope and optimism. Nonetheless, few participants expressed that some of the nurses were unfriendly towards them.

The participants described how some of the nurses were *authentically* available to them during the IVF treatment process. Three of the women shared their stories as follows:

Francisca explained how some of the nurses were being supportive, helpful and willing to be of service to her. She was emphatic as she stated:

'They were all my friends. My relationship with them was very cordial. I used to joke with them and constantly I speak to them politely. They also loved me as they said that I was not like other patients who were rude and talked rudely to them. I took their numbers and used to call and find out how they were doing. Their service to me was 100%. Some of the nurses were being supportive, helpful and willing to be of service. Even if I called at 10pm they would pick up and offer me all the assistance I needed.' **…. Francisca.**

Caring involves interpersonal maintenance of therapeutic relationships. The women in this study appreciated the physical assistance and comprehensive support provided by the health care professionals at the clinic as this helped in building confidence when they embarked on their IVF treatment journey. The women described that, *being there* was significant to the IVF treatment experience as Heidegger explains that *Dasein*, as *being-with- and others,* is significant in building healthy and supportive relationships (1927/1962).

The staff (referring to the nurses), made themselves available to Juliet during the process, providing emotional, physical and informational support. **Juliet** described her encounter as this:

'The staff were nice to me. They carry out their normal duties, customer satisfaction is normal. They answer all the questions we ask but if you don't ask them, they will not talk to you. They will call you to remind you of the injections. When I get to the clinic and I have any problem bothering my mind I ask them. If I find them doing anything contrary to what I have read, I question them. Some of the nurses offered emotional support.' **…. Juliet**.

My initial interaction with **Isha** was in 2016 when she was 30 years of age. She was diagnosed as being infertile for the past five years. **Isha** is a Muslim who works as a petty trader, neither **Isha** nor her husband have any children**.** She has received infertility treatment for four years and this was her first IVF attempt. I met **Isha** for the first phenomenological conversation five days after her IVF treatment failed. On that day she was upset and heartbroken since she was told about the treatment failure. She had experienced one previous pregnancy loss as a result of an ectopic pregnancy. Isha After experiencing a miscarriage five years back, **Isha** has been trying different avenues to conceive a child but all to no avail. It appeared the couple has lost hope in IVF treatment. Yet still **Isha** and her husband have determined that they would try another IVF treatment again despite the disappointment.

Isha narrated her experience with me:

'They are all nice, whoever you meet at any time smiles at you. When you are going to the hospital to take the injection and they are even busy, (the nurses) they will have time for you, but the problem is when you don't go to them they will not bother to come to you either.' **…. Isha.**

Mavis claimed that almost all the healthcare professionals at the health facility related very well towards her. Though, a few sometimes showed an awkward attitude towards her. She stated:

'Oh! It was nice; they converse with you and encourage you that it is worth doing it. As for the nurses you would not get everything perfect, that are human nature, you would get one or two to mistreat you. However, some of them when you ask them a question, they will not even mind you they will just ignore you and go ahead and do whatever task they have been assigned to. Yeah! As for that I have encounter a lot of such things. Notwithstanding, some are also very good. All the doctors also relate to us nicely.' **…. Mavis**.

Lois also stated:

'*I received encouragement from some of the nurses and the workers around*.' **…. Lois.**

Akos had a different opinion to share. She expressed:

'Okay their attitude was not all that good and disappointed in the support shown but because I needed a child, I decided to ignore everything that was happening.' **…. Akos.**

The result also highlight that the nurses focused on routines and tasks but not practicing wholistic nursing care. This is captured in the following statements of the participants.

Mavis discussed her frustration about the insensitive care received:

'*Madam it was so bad, very bad and humiliating. You can even have heart attack looking at way the counsellor disclosed the result of the pregnancy result. They should change their strategy. It is bad, very appalling. It is very bad! Bad! Bad! Very bad!* [With much emphasis]'. **…. Mavis**.

Isha's statement indicate that some of the nurses at the clinic focused on routines and tasks but not practicing wholistic nursing care:

'Some of the nurses were insensitive to our plight. A number of the nurses were laughing at us when the result was negative. It was humiliating. They are there to only performing their task. They are just there to give us injections. Every day when you go for the injection, they will not explain the side effects to you. They just give you the injections and then that is it.' **…. Isha**.

The women were concern about the help and support received from the healthcare professionals providing fertility services as they wanted to do the best, they could for themselves in order to fulfil their dreams of motherhood. Unfortunately, the participant's described encounters with healthcare service *entities* that reflected *unready-to-hand-mode* of engagement when they entered the world of ART for their treatment. Within these negative encounters, the participants revealed services that denied their rights as service users. Some of the women were not happy and objected to the fact that the nurses' in-charge discharged them from the hospital between two to three hours of bed rest because they were concerned about dislodging the embryos.

Each shared her experience as this:

Francisca shared her story with me:

'I would like that after the procedure or transfer, they should allow us to stay in the hospital for observation and monitoring for the first month. In fact, I did not like the way the nurse came to discharge me to go home after staying for only two hours.' **…. Francisca.**

I asked her who will incur that additional cost for the one month stay in the hospital. She had this to say:

'Oh Maame! The cost is not an issue. Safety first; It is your own extra cost. The more you stay in the hospital they could reduce the cost for you. For instance, if it was 100 Cedis [Local currency] *they could reduce it to 70 Ghana Cedis for you and so on so that you could stay at the hospital for a bit longer so they could monitor you. Then after your first scan is done and everything is fine, they could discharge you home. If you pass your first month there, when you leave for the house you would know how to cope better; what to do and what not to do. It is not good that we come home and be on our own during the treatment. Complications like bleeding will be better taking care off at the hospital, when you are at home and you see blood flowing you become alarmed, you will not know what to do at that time. You become alarmed and frighten if you see even little blood. I believe staying in the hospital is better. It will really help us a lot if they allow us to stay at the hospital for a while after the transfer.'* **…. Francisca**.

Akos was also not happy concerning the way the nurse asked her to go home following the embryo transfer. She believed they should have admitted her for some time after the embryo transfer. She felt she was denied *authentic* care which could be extrapolated to *inauthentic Dasein*.

'After the embryo transfer, I wanted them to allow me to stay at the hospital and then rest for some time before even going home. Because when they did the embryo transfer, I slept for about two hours and then the nurse asked me to go home straight away, I sat in the car, and I went home after that I bled a lot. Sometimes I become alarmed as to whether the embryos had dislodged when I urinate.' **…. Akos.**

I probed further for clarification if she wanted the nurse to admit her. She responded:

'Exactly; because I thought that if they had allowed me to stay at the hospital even for a week, it would have been successful. If only I have gotten more rest probably, I would be successful.' **…. Akos.**

Concerning the information given, some of the participants expressed that they were provided with accurate and detailed information which helped enormously whilst others expressed a different opinion that they had unmet informational needs.

Francisca explained:

'When I went to the clinic to start the treatment the doctor explained the IVF procedure to me concerning the drugs to use, gamete retrieval and transfer. There is also a nurse who will talk to you and explain everything concerning the IVF procedure to you before you go and see the doctor. So, I did not have any questions because I understood everything. The way the nurse explained the whole thing there were no need to ask further questions again.' **…. Francisca.**

In our conversation, I asked her whether she was told that the IVF treatment may fail. She responded:

'Yes, they tell you about that during counselling. They tell you that it could fail but if you have more embryos, they will freeze it so that in case the procedure is not successful they will do another transfer for you at a reduced cost. They talked to me about the chances of multiple births and failure. The doctor said it depends on how your hormones would react to the treatment you are giving.' **…. Francisca.**

Similarly, **Juliet** explained that she understood the consequences and complexities of the treatment process only after experiencing it. She also shares her story with me:

'There is a counsellor around who talks to you and then the doctor would also explain the procedures to you before the treatment commences. Then when you come for review and have a problem you can also seek for clarification. You know, you wouldn't know the complex nature of the treatment before the procedure, it is after you have gone through the process and is not successful or failed

that is when you begin to think about the consequences and complexities because you are happy and you want it to be done quickly for you. When you test negative it is then that you tend to ask about what caused the failure. You see! Because of the joy of becoming a mother from the beginning you will not think about consequences, but when you get negative result it is then that you will ask, what happened? What went wrong? It is then that the doctor will explain the procedure well to you, but you can't do anything about it. It has already happened you just have to accept it and go home and cry.'…. **Juliet.**

Her story unfolds:

'The doctor also said there could be chances of multiple birth, due to the stimulation you tend to produce more eggs, you could get about fourteen to twenty eggs and they will transfer three or four and thawed the good ones so if you are lucky this will increase your chance of multiple birth.'…. *Juliet.*

Akos said:

'I did not ask a lot of questions about my condition and treatment because I read a lot from the internet. The doctor explained to me that he will freeze some of my eggs that are good to do the next IVF cycle in case the first procedure is not successful and that is what I am going to use for the second attempt. Some of us had frozen eggs so they were told that they could go for the transfer. He also advised us (my husband and I) that we could continue with the IVF treatment and those of us who had frozen eggs could do the transfer.'…. **Akos.**

The women also had issues with regards to appropriate information disclosure on the process involved in the procedure. Some women needed additional information concerning the assessment and the process involved in the treatment in order to inform fertility decision making. The participants were of the view that healthcare professionals (nurses and doctors) neglected to give adequate information regarding the process involved in the procedure.

In the words of **Isha**, she had a different story to share as far as communication and information were concerned. I asked her this question; 'How will you describe your satisfaction with communication and information at the clinic?' She lamented:

'I was not satisfied at all with how the doctor communicated with me. It was the counsellor who explained things to us concerning the IVF treatment. For instance, he will tell you about the injections, when the doctor will need your eggs. From the beginning when you go to see the doctor, he will write everything in the folder and the nurses only follow the treatment plan by the doctor. He also gave me a calendar to follow but I did not understand it quite well.' **…. Isha**.

Isha demanded more information regarding the process involved in the IVF treatment:

'I wanted the doctor to explained and give us information on the process involved in the procedure before the treatment begins. It was the counsellor who told us that the injection was painful because it is oily based so you will feel pains at the buttocks. But as for the nurses they will not explain it to you, they just give you the injections as prescribed.' **…. Isha**.

Similarly, Juliet recalled:

'…. though they have been encouraging me a lot I expected much from them.' **…. Juliet**.

Akos also had similar experience to share concerning the informational support received from the hospital:

'The support was not enough because with every step in the IVF process you would have to ask them what you should do. You would have to ask them before they would explain things to you. The support was not so much I was really lost along the way as I did not know what to do about it. I was also not too happy about the way they treated us. I was not satisfied with some of the information provided. In my opinion I think I should have been given prior information on the processes involved in the procedure before I even started with the treatment. Sometimes you become confused when the counsellor calls you unexpectedly and tells you the next thing to do.' **…. Akos.**

She expressed her disappointment:

'For me, I did not get what I expected. Even though, there was a cordial interaction with some of the nurses and other staffs it was not up to my expectation. I didn't know there was even a counsellor you are supposed to call when you need some information it was later that I got to know about the existence of the counsellor. What I expected that I didn't get was also the positive results.' **…. Akos**.

I probed further for **Akos** to clarify how she expected the healthcare professionals to treat her. She explains:

'I wanted them to treat me as a very special person, but I was not getting that kind of treatment. It looked as if I was, I was worrying myself so much. For instance, when you go to the hospital, it's like you want people to come near you and then tell you a lot about IVF. You want them to give you more information about the IVF treatment but that was not the case. At some point I had to call a friend who had actually gone through it for information.' **…. Akos**.

Isha and **Francisca** had similar experiences to share:

'Before I started the procedure, he [referring to the counsellor] *didn't have any discussion with me; all he did was to give me a phone call to inform me that I'm supposed to come for the injection which will aid the removal of the eggs. Then in three days' time I was called to come for the eggs to be removed. I never had a face to face conversation with him* [the counsellor]*, he called me on phone.'* **…. Isha.**

Francisca expressed that:

'For now, the only support I received from them is that they call me to check on me and encourage me. The counsellor, also calls me to encourage me. They tell me that I should not give up hope and not give up for such is how the treatment is. That is the only support I received from the clinic.' **…. Francisca.**

I asked **Francisca** and **Isha** whether they expected to receive any other support apart from the telephone calls they received. **Francisca** had this to say:

'Yes, I expected that they offer me this support; since my first treatment failed I expected the doctor to tell me to pay for the drugs and then do the treatment for me, because I did not have any embryos left and it means they would have to start the whole process again so I expected them to say that if I did not have the required amount of money, then I should pay for only cost of the drugs for them to commence the second treatment. During the first treatment I spent huge sums of money but all he said was that he was going to reduce it for me. As to how much the reduction will be, he did not tell me. It is very expensive, so I expected him to tell me specifically the amount to pay for the second treatment.' **…. Francisca.**

Her story unfolds:

'I also needed them to call us when the treatment was not successful, but they leave you alone. This is the kind of support I needed from them.' **…. Francisca.**

Isha also expected the doctor to allow her to pay half of the cost and allowed her to pay the rest in monthly instalments for the second IVF cycle:

'As for help, the doctor should have called us and consider us a bit. For instance, by saying I sympathise with you for the unsuccessful process and that you pay something little for a second cycle. But he didn't say anything of that sort. I just needed such words, because there are instances of people who have done the IVF treatment for more than three times who needed such support but the doctor was not there for them. Or if they could have taken half of the cost and allowed us to pay the rest in monthly instalment, that would have also been considerable. Money nowadays is difficult to come by. We don't have such a huge amount of money to do it again.' **…. Isha.**

Lois shares her experience:

'One other support I needed from the clinic was that, I wanted the doctor to explain vividly what is involved in the procedure before the commencement of the treatment. Actually, I did not understand a whole lot of things concerning the IVF treatment from the very beginning, for instance it was later that I realised certain things like you can use donor eggs. It was after I lost the pregnancy that, he

told me that because of my age I should have used a donor egg but he didn't tell me from the very beginning of the procedure. He told me that everything was fine with my age and that he would use my eggs then after the procedure has failed, you now tell me that I should have used a donor egg. I asked him if he knew that I should have used donor eggs because of my age why didn't he discuss it from the beginning of the treatment so I could go for that option he denied it outright. He then took my folder and saw that he had written it in my folder. He told me that he wrote it in my folder and expected me to read. "If you had written it in the folder how do you expect me to read from the folder that is not my duty?" I didn't read the folder and he should have told me or explained it to me because if he had explained it well to me I would have known what to do. When I sent the folder to the nurses at the nurses' station, they also never told me anything the nurses just took it and showed me what to do next. So he said there is nothing he could do but to start with another procedure then he went ahead and said that the only thing that the hospital could do was to reduce the cost from 4000 to 3500 US Dollars.' **…. Lois**.

Her story unfolds:

'If he [The Doctor] *had explained it to me I would have gone for the option of the donor egg. I even argued with him on the matter because he didn't explain anything to me if he did discuss it with me I could have gone with the best option. He said that he just discussed it with another couple who just left the consulting room but they could not understand why they should use a donor eggs but I said the fact that you told them does not mean you discuss it with me also. I thought that I was coming for this treatment once and I would have my baby so you could have done what will help me get my baby and now because of this I have to do it again. Even when he started with the treatment I asked him If I was responding well to the treatment and he said he was surprised I was responding well in relation to my age that means that he could use my embryos but now that it has failed you are now telling me that I ought to have used a donor egg. Now I am not certain if I will even use a donor egg for my next treatment or my own embryos.'* **…. Lois**.

In my conversation with the motherless, several women said that counselling support was available at the facility clinic, but they expressed that the support was not enough. They continued that they would have appreciated it if they could explored an alternative path for advice like someone with similar situation who had actually gone through the process not just only the counsellor being there.

Francisca and **Lois** were of the view that counselling and support are essential during the procedure.

Francisca share her idea:

'Yes, I think there is the need for counselling. In some cases, for instance in my case, it was my first time and I believed that though there was a counsellor they should have gotten someone who had had a successful IVF treatment and had given birth to talk to the upcoming ones on things she did, the food she ate, her experiences and what she did for hers to be successful. The counsellors do teach us, but I think that if we could have that person's personal experience it would be very helpful instead of just the counsellor talking to us. I think it could have helped if we talked to someone who had gone through the process. She could join the counsellor in talking and teaching us.' **…. Francisca**.

As revealed by **Francisca**:

'…… as to the lady I met that has conceived triplets, she didn't even lift up a spoon, and her husband did everything for her. All she did was complete bed rest. I think if they can invite someone like that to share her experience to us, we will also appreciate it.' **…. Francisca**.

Lois was of the opinion that there is the need for counselling and support during IVF treatment but in her case, she did not receive any form of counselling before, during or after the treatment:

'It is very important. I think that things should be explained well from the very beginning of the treatment to help us understand things well. When we are well informed then we will be able to participate fully. Again, I think that counselling should be on-going from the beginning until the end of the process and even after the procedure is not successful. This will also help reduce anxiety even when you are not successful.' **…. Lois.**

Lois expressed further that:

*'They did not counsel us from the beginning, but it was during the process that they will call you to either come for injections or to do a procedure. I did not set my eyes on the counsellor. The first time I spoke to him [*referring to the counsellor] *was when he called me to tell me to come for my injection and that the doctor said we should continue with the drugs. During, the process too I did not receive any counselling concerning the treatment. It was when we were going for our results that he* [the counsellor] *spoke to us. So, when you do the pregnancy test they will tell you to wait for the*

counsellor to talk to you. During the session the counsellor will only ask you if you hear a negative result what you will do. Then I also answered Ah! What will I do; I have nothing to do? Then he will start to announce the result both the positive result without considering our privacy and confidentiality. He will then tell you whether you were positive or negative. This person result came out positive whiles this one was negative just like that.' **…. Lois.**

Lois expressed further that there should be consistent and right information giving:

'They should tell us more encouraging things and lets us know that it could be negative or positive right from the very beginning. They should tell us that the treatment is not hundred percent successful it could fail. If we understand things properly right from the beginning the impact of the news would not be grave. But when your mind has not been tuned to the possibility of failure and you are told abruptly like that if you don't take care you will go into shock or become mad. The counselling should start right from the beginning and be on-going and even after the treatment had failed. The way the counselling is done at the clinic is not good at all.' **…. Lois**.

Juliet expressed similar sentiment:

'Counselling is very necessary, many people are ignorant of what this treatment entails so you need to explain to them what the procedure entails before, during and after the treatment should be brought to light. You need to assure them that it is not 100% effective and then the outcome might be negative and if it turns out to be negative the coping strategies to use to enable them cope. This is because it is not everybody who is able to cope with a negative result. Some of us we took Bank loan so if at the end of the day it is not successful where you do expect the person to get money to pay back the debt? Some of the people I met at the clinic, you could see that they have given in their all. Some can even go mad, because some are emotionally weak. If you don't get a supportive partner, you would struggle a lot. I wonder whether the person can survive because it hurts.' **…. Juliet.**

Juliet describes a more acceptable scenario. She explained further:

'I think counselling is needed during the two weeks waiting period after the embryo transfer; they shouldn't leave you alone as they did. The counsellor and the doctor should tell us about some of the coping strategies during that period. I developed my own way of coping through diversional therapy such as learning, reading and watching television since I did not receive any counselling during that period.' **…. Juliet.**

She further suggested that they should do intensive assessment

'*I think they should do an intensive assessment; they should really do the assessment well. You need to find out what caused the failure in the first place then you tackle it from there before pursuing a second procedure. That is the duty of the health workers so as not to repeat the same mistake.'* **…. Juliet**.

Juliet's comment below highlights how she benefited from emotional support received from a woman who was conceived through IVF treatment for the first time:

'*I also think that if we have something like peer groups, we could share our stories and then we encourage each other, it would be of benefit to all because sometimes you need someone to talk to in order to ease some of the stress. I quite remember the first time I came to the clinic there was a patient here who was successful in her first attempt, so she even encouraged me. She told me she has been married for 17 years with no issue but she became pregnant for the first time through IVF treatment so she encouraged me and said don't worry you will become pregnant. She told me I shouldn't worry and that I will conceive. If you hear such words of encouragement it stirs up your hope. If I see pictures around with babies born from IVF treatment, I become happy, so support group is very necessary I even started to see babies in my dreams.'* **…. Juliet**.

Isha also said:

'I think if we also have some small groups where we can meet and share our experiences it will also help. We can also to ask questions and discuss matters of interest among ourselves, this this will also go a long way to boost our moral during the treatment.' **…. Isha**.

Akos also express similar idea:

'I think it would have been a great opportunity to receive help from women who have truly gone through the same process to share their experience with us.' **…. Akos**.

Akos insisted there should be on-going professional counselling with much emphasis emotional and psychological issues:

'I think during the two weeks waiting period they should have called us and encouraged us, but they will leave you alone and only call you when it is getting to the time that you have to do the pregnancy test. On-going counselling should be done and continue even after the procedure had failed.' **…. Akos**.

I asked **Akos,** 'given what you know now are there things you would want the healthcare workers to do differently if there is a second chance?' She shares her idea:

*'For me, I would like them to give us a little more information within the 2 weeks wait after the embryo transfer, especially, in relation to counselling. The emotional aspect we will be going through. What and what not to do. Honestly the 2 weeks waiting period was not easy. I heard that we were not supposed to take milo beverage because it has an effect in the blood which affect implantation after the transfer is done. If there was any nutritional aspect or information that will help during implantation, they should research on it and let us know so that we could stay away from all these things that may cause harm to us at that time.' ….***Akos**

She emphasises:

'There should be a better patient-informed approach by establishing a better pre- and post-treatment counseling sessions.' **…. Akos.**

During our conversation I was intrigued by the way all the women complained about how the information was disclosed to them on the day when they did the pregnancy test. This was the most apparent in all the participants' phenomenological conversations. All the participants shared with grave concern the way the counsellor disclosed the result of the pregnancy outcome. They all expressed dissatisfaction with the way the information was disclosed to them as they needed privacy and confidentiality. They also expected the doctor to be there and talk to them during that day but all to no avail.

Each **(Isha, Francisca, Lois, Akos, Juliet** and **Mavis)** shared their experiences as this:

Isha expressed her disappointment about the way information was delivered when the IVF treatment was not successful:

'That is what even bothers us, because we were seven in number. It was only one person who came out successfully. She used the donor eggs and she was successful. Those of us who used our own eggs were not successful. I was also not happy and disappointed with the way the counsellor called us together in a room and broke the news to us. It did not go well for some of us at all.' **…. Isha.**

For **Isha**, the physical presence of the doctors was deemed significant at the time of delivering the outcome of the pregnancy result.

'My sister! If anything, it should rather be the doctor to call and talk to us not the counsellor. We were all expecting the doctor to talk to us, but he didn't show up. The doctor should have talked to us and explain that these are the reasons why it wasn't successful. As for a friend of mine it had even made her ill. She nearly got mad because that was her third time. So as for that incidence we were not happy about it at all because I for instance my husband asked me what the doctor told me, and responded that as for the doctor we didn't set an eye on him. He didn't set his feet there to even tell us anything. My husband also responded that this was not the work of a counsellor. It was the doctor who has to be responsible with his work because we all expected the doctor to come and encourage us and explain to us the problem which made it unsuccessful.' **…. Isha.**

Her story unfolds further:

'The counsellor told us that the treatment was not successful so everyone should pack her bag and baggage to the house. At that point we all were hurt. Everyone said the doctor didn't do well. We exchanged telephone numbers, and everyone was disappointed at the doctor. Everyone was hurt. We waited for two weeks hoping the doctor will call us and explain things to us, but he never called. So my husband called the counsellor and the counsellor explained to him that they kept one of my frozen embryos and that if I am ready to do the procedure again it will cost four thousand Ghana Cedis. Up till now the doctor hasn't called to say anything to us.' **…. Isha.**

In addition, **Isha** reported that she was not satisfied with the way the information was shared at all. She expected the doctor to be there and talk to her during that day but all to no avail.

'I was not satisfied with the way the information was shared at all. We expected the doctor to be there and talk to us during that day but all to no avail. All they did was to tell us what they wanted to say and after that we took our bags and left home so sad and that meant that they were done with us. That was not how it should be done. It is hard coming by money, apart from the 16 thousand Ghana Cedis (one hundred and sixty million old Ghana Cedis); we have made extra expenses. If we should really calculate, it could amount to 20 thousand Ghana Cedis (3500 US Dollars). So if all this huge sum of money goes to waste just in a day and we aren't encouraged it's bad. My sister it is painful. We have really been sorrowful. We have left all in God's hands.' **…. Isha.**

Isha expressed her opinion concerning the way counselling should be done:

'*With the counselling aspect, a little change has to be made; he shouldn't gather all of us and tell us the outcome of the result. Separate individual counselling session is preferable. Again, I think they should intensify the counselling, the assessment should be done well, and they should give us details as to what the whole program involved.'* **…. Isha**.

Francisca was also not happy with the communication concerning the way they broke the news to her on the day of the disclosure of a negative pregnancy outcome. **Francisca** also shared similar view:

"I also did not like the way the counsellor communicated to us concerning the way he shared news about the result. It should be done privately. This one is confidential and private matter. I was not happy at all with the communication concerning the way they broke the news to me when the treatment was not successful. I expected the doctor to be there and spoke to us after the treatment was not successful not the counsellor. I believed that there should be counselling at that stage. After the unsuccessful treatment when you come home that will be the end. They will never call you again to enquire how you are faring they leave you alone in your own journey. The doctor should be able to say something that could console you and give you hope. But all he says is that he did his very best and will tell you when you are ready for the next cycle, we are ready to help you. For that I was not satisfied at all. I expected the doctor to be calling us to give us word of encouragement rather than just saying if you will want to do it again where are there to help you. In helping terms, how are you going to help? Vida look at that moment you will be seriously hurt and if you do not take care you will become depressed. It is not fair, the doctor could have told us specifically, and the type of help he could offer to reduce the stress and have hope for the future and the help must also be substantial because we paid a lot of money. When you go to a funeral and somebody is weeping very loud it is because of the financial stress he or she is in and that he has lost a dear one.

Her story continuous:

I suggest there should be counselling at that stage and also after you have gone home they should be able to call you because you are their customer, they should call you and communicate with you and share words of encouragement.' **…. Francisca.**

Lois also shared similar experience:

'I was not happy with the way the counsellor announced the result. He should have provided privacy; and should not announced the result in the presence of other women because with us, the people that entered the counsellor's office, it was only one of us that had negative result and it wasn't nice that she had to hear the news like that with the rest of us that had positive result. When I came home, I even called the counsellor to tell him that the way he pronounced the result was not nice at

all; at least they should have separated us so that the person will not feel like she was the only person that had negative result. It was so awful and disheartened. When the lady with us heard that she was the only one whose pregnancy test was negative she could not sit down again she became restless, sad and decided to leave. If this was done tactfully, she would not have felt very sad and left the hospital in that state.' **…. Lois.**

Lois was of the view that counselling should be done independently. She had this to say.

'Counselling should be done separately or do it individually, if they continue to do that, they will be killing people. I think there is the need for counselling but the way the counselling is done should be reviewed.' **…. Lois.**

It was also clear from **Akos** statement that she needed privacy and individualised approach to care from her IVF carers. **Akos** had this to say:

'I was not happy during the announcement of the pregnancy test results however, it was the counsellor who announced the results, I expected the doctor to come and talk to us concerning the results, but he was not there for us. I was also not satisfied with the way the counsellor broke the news to us. He could have informed us independently there was no privacy at all. I later visited the hospital and the doctor apologised for not talking to us on that day. I honestly accepted his apology. He informed me that he was expecting very good results and when it turned out differently, he could not come to terms with the low success rate.' …. **Akos.**

Juliet said:

'I was not happy about the way the counsellor broke the news on that they. We all needed privacy. It was unethical for the counsellor to have done that. I think they should do something about as soon as possible.' **…. Juliet.**

Mavis was alarmed about the way the news was disclosed to her:

'I was also not happy and upset with the way the counsellor called us together in a room and broke the news to us. It did not go well for some of us at all. I even told my colleague that we should write a letter to the hospital management to change their strategy as it is causing a lot of harm.one lady collapse as soon as she heard that she was the only one who had negative result. If I have a second chance what I would say is that, the hospital management should change the way they do the counselling especially, on the day the pregnancy test will be announce. I must say it is very bad [with much emphasis]. The way the counsellor broke the news is very bad. I do not have any idea as to how other hospitals does theirs because ours is nothing to write home about. The way the break the news to us is very bad and appalling they should change it as soon as possible. He should separate those who were positive from the women who were not successful. I suggest we need privacy and separate counselling sessions. It is very important.' **…. Mavis**.

Care (*Sorge*) is a central philosophical tenets of Heidegger's concept of the three *existential* modes of *being*. A sense of being connected to the *world* of other *entities* is vital for Heidegger. The study revealed that providing *authentic and wholistic* care requires the IVF carers *'being with*' the women *authentically*. To provide answers to Heidegger's question what it means to be in existence there is the need to go deeper the lived experience of the motherless world of IVF journey to uncover their being in the treatment.

A sample of Field Notes recorded in my diary during one of the phenomenological conversations with **Mavis.**

Journal Entry Saturday 20th August 2016

Mavis decided to participate in the study the same day I approached her. She was the first person to have the conversation. She sounded particularly keen and excited to take part in the study. The first phenomenological conversation took place at the Hospital's conference room. She spoke at length about her IVF experiences, and explained how nobody understood the painful experience she went through. I was convinced that the conversation might prove therapeutic, and provide quality and a rich source of information. Mavis looked tensed and nervous on the day of the conversation. I was *also nervous since this was my first time. She was sitting on the edge of her chair with arms crossed across her chest. There were very few pauses and noted moments of silence. In the course of the conversation she became sad and shed some tears as it brought back painful memory. At times cried quietly for a moment before continuing the conversation. She was concerned about the way information disclosed about the outcome of the pregnancy test result. I had already observed Mavis to be a bit of a high-tension, but I sensed this titbit of information was causing a growing emotional Angst and confusion for her as we approached the end of the conversation. Through self-reflection I became aware of the challenges faced by the participant's because of my personal experiences with failed IVF treatment and my also background as a nurse.*

After a conversation with **Akos,** I recorded my observations in my research diary.

Journal Entry Monday 29th August, 2016

Akos and I met in her office, waiting for me. She welcomed me with a smile on arrival at her office, I was treated with kindness. She was extremely nervous and little tensed prior to the first conversation. She was a little uncomfortable. I noticed how Akos was disappointed with the care received as she emphasised that she did not receive the level of attention she had expected at the clinic. She told me she was not aware of the existence of counselling services at the clinic. Later in the day, I received a telephone call reminding me to tell the counsellor to review the way information is shared concerning the disclosure of the outcome of the pregnancy test. She spoke quite frankly and was confident, became silent and reserved at times in the process of the conversation. She was also a bit hurry to attend an emergency meeting. You only know caring exists if you have experience.

I guess caring means different things too many people. For me, this is what caring all is about. Personally, caring means understanding and showing concern; Caring is support; Caring is making time and physical presence; Caring is showing empathy and being there; Caring is acceptance; Caring means want to care and being there. For caring must be something you personally choose and understand.

Throughout the phenomenological conversation the women were enthusiastic and laughed, some became sad and tearful. I also noted periods of silence, pauses and nodding, as well as vocal intonations in the process of the conversation and the feedback sessions. Observing these characteristics is significant as the audio recorder does not record non-verbal cues and actions in the recorded conversations.

All the participants also stated that they were happy to have participated in the study as they wish that by sharing their experience women in similar situations might be helped. I felt relief as I was able to give them the voice to be heard and shared the painful experiences of unsuccessful IVF treatment.

Mode of *being-Inauthenticity*

Major Lived Experience Theme -Facing up to the *Angst* (*Angst, Fallenness)*

The theme of **Facing up to the *Angst*** illustrated in this section describe how anxiety pervaded the life of the women when undergoing the IVF treatment. It also identified from the women during the phenomenological conversation that, some medication side effects, financial constraints and uncertain outcomes of IVF treatment was not appreciated by the women.

Inauthenticity may result from a wilful denial of the *existential* truth. From the hermeneutic interpretive process, four main sub-themes were discovered and interpreted. The sub-themes are: (i) '*Angst* of uncertainty'; (ii) 'experiencing *existential* faith and hope'; (iii) 'guilt and self-blame'; and (iv) 'non-disclosedness'.

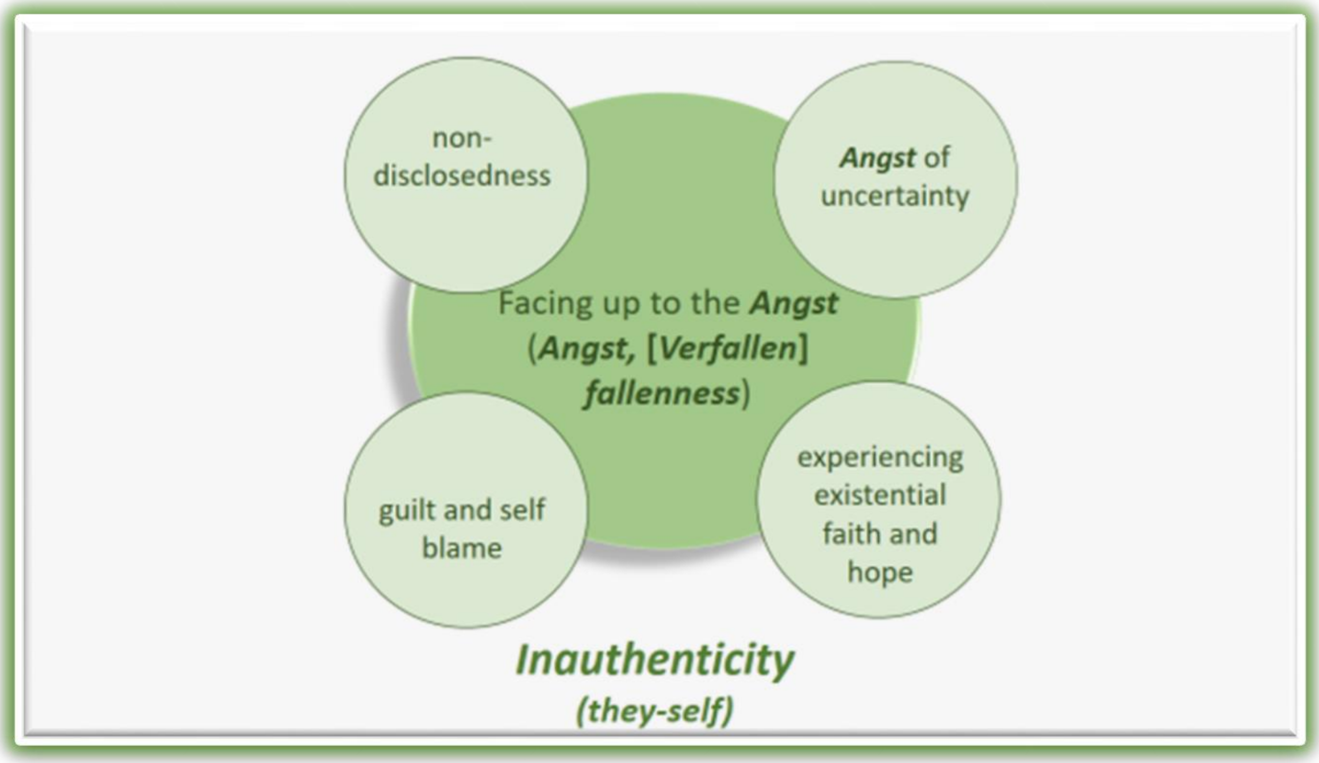

Figure 4: Thematic engagement of the relationship of the sub-themes of the Lived Experience Theme: Facing up to the *Angst* (*Angst, Fallenness)*

Angst of Uncertainty

Uncertain outcome(s) was common sub-theme shared by the women though each situation was experienced differently. The phenomenological interpretive process revealed that the outcome of the IVF treatment was never certain irrespective of every effort made. Uncertain outcome of this stressful and painful process of IVF treatment left the women feeling anxious and devastated. Nevertheless, these feelings of *Angst* is a revealing experience to overcome our *being-in-the-world* of IVF treatment when understood from a Heideggerian perspective.

Akos stated:

'I understood that life is about taking risk and I was ready for the treatment though I had done some research which informed me that the IVF treatment was not 100% successful.'.... **Akos**.

Juliet expressed her anxiety:

'I had to think about it a lot because the procedure was new to me. I was thinking about the outcome like what will I feel because after everything that I have gone through if this treatment was not successful what will I do? That was all that was going through my mind.' **…. Juliet.**

Mavis stated:

'When I heard about the IVF treatment [paused for a while] *from the beginning when I heard about it, I heard it on two sides. My father told me chances of succeeding are fifty-fifty. You may or may not be successful so when I decided to receive the IVF treatment, I knew that the procedure the back of my mind that it could fail. I did not make up my mind that I have to succeed by hook or crook because if you make up your mind that you will definitely have it, it can disturb you and you can even go mad.'* **…. Mavis.**

The feeling of uncertainty expressed by the participant, actually turned into anxiety and stress when they undergo the IVF process. They also felt that the outcome of the pregnancy results are out of their control which made it more stressful.

This is captured in the following narrative of **Mavis**:

'There is a lot of thought, before it would even be done for you, the processes you will even go through like the injections is painful and the screening is time consuming. After the embryo transfer has been done, the thinking that goes on during the first two weeks even makes it more stressful; I was uncertain either it will be successful or not? So, if it is not successful your money spent going waste or not. You pray and watch television.' **…. Mavis.**

However, the stressful and painful nature of this treatment should have yielded a positive, certain and absolute results, but IVF user explained the issue was different:

'It leaves you in a lot of suspense and anxious in waiting for the outcome whether it will yield positive result was never certain.' **…. Francisca.**

All the women he study that the agreed that the most stressful period in an IVF treatment procedure cycle is the waiting after embryo transfer to find out if the treatment has resulted implantation and subsequent pregnancy. Several of the women stated that, the two weeks waiting period was accompanied with heightened anxiety. *Angst* of uncertainty appeared as a constant interplay between hope and doubt while waiting for pregnancy test result.

Mavis described the two weeks waiting period as a roller coaster of emotions:

'The day of embryo transfer there was mixed feelings of sadness and happiness at the same time sad. Why am I saying you will be sad? This is because you will be thinking about the outcome. Is it going to be successful so that my joy will be complete? You know, all the time you will be thinking about it. There is never anyone who would say she would take her mind off during that period. I for one, I was not able to sleep; I lost appetite and could not eat; it really entails thinking. So, when I come for the injection you realize that I looked a bit pale, I lost weight, it does entail a lot of thinking. Its more than anything, there is a lot of thinking during the two weeks waiting period. I was anxious and waiting for the outcome of the results. You can't focus on anything especially the day before the pregnancy test. The two weeks waiting period is a roller coaster of emotions.' **…. Mavis**.

Juliet recalled that waiting for a pregnancy test was excruciating associated with strain financial burden. Juliet's words describe the unpleasant nature of emotional drain:

'After the transfer I had to wait for two weeks for the result and the day of the result too was breaker. The two weeks waiting period is a very hectic one, you wish it is already two weeks so that you can know the result, but it seemed never to be due and you will be waiting in suspense. When the two weeks waiting period ends you wait for two hours for your result at the hospital and this hour makes you even more anxious since you are uncertain. It is like time should run very fast for you to know the outcome; you want to know the outcome of the result from the laboratory technicians.' **…. Juliet.**

Juliet shares more of her experience with me:

'During this time, you will even become more anxious since you are uncertain and after you have been given negative results it really hits you like something big has fallen on you. [Shock] *Waiting for a pregnancy test was excruciating. It is very stressful; it's really hurt so bad. It is emotionally*

stressful and painful as well; for that I can't deny it. I cried, I cried a lot, but the counsellor reassured me that since I have other frozen eggs, I can use it to do another cycle to increase my chances of getting a baby. So, I consoled myself since I had other frozen eggs left for me to do the next IVF treatment. You will be elated from the beginning but when you get negative result it hurts, looking at the cost involved. The huge financial burden spent but at the end of the day you will not get anything from it. The money is wasted. If we used the money to do something else, we could have benefited from it. My husband and I we were disheartened.' **…. Juliet.**

Isha was hurt, after spending such a huge sum of money but the procedure was not unsuccessful:

*'My husband works at Prudential Bank, so he took a loan from there and that was our source of finance for the procedure. In fact we were all hurt, after spending such a huge sum of money to do it and it turns out futile, it is so painful, it's painf*ul.' **…. Isha.**

Lois complained that costly nature of IVF treatment has brought a huge financial strain:

'*I had financial problems. Financially, it was hard. It was not easy. I must pay off the loan I took from the Bank. And, apart from the IVF cost, there are some expenses you have to incur like transportation cost, other drugs and even the consultation fee and other things. It has not been easy. It has brought a huge financial strain; the treatment has caused a lot of hardships for me.'* **…. Lois**.

Lois described the two weeks waiting period as like writing exams and wondering if you would pass or not:

'Apart from the money, the treatment itself was not easy. It was time consuming. It was difficult and stressful for me. There is a lot to it than to meet the eye. After the embryo transfer going for the results was not easy at all. The two weeks waiting period was full of anxiety. It was like writing an exam and wondering if you would pass or not. Whole lots of anxiety; I was anxious to know whether it was going to be positive or negative and that was not easy at all. As I said earlier, I really had confidence that it will be successful; although I was scared at certain times, but I was really hopeful and had confidence that the results would be positive.' **…. Lois.**

Sub-theme: Experiencing an Existential Faith and Hope of *being-in-the-mother-world*

This sub-theme emerged from the participants' experiences of deciding to undergo IVF treatment and belonging to a world where motherhood was deemed privileged. Hope was associated not only for the desire of a child with their husband but also for a future as a mother. Faith is described as an enduring and central tenet in the lives of the women during the IVF procedure. They all expressed a sentiment of praying a lot and having faith in the Supreme Being [God or Allah] which brought hope and assisted them make *meaning* despite suffering.

Francisca grinning in excitement as she recounts her story:

'Religiously, it affirmed my faith in God in that I believed that I have a God who is able to do all things and that if you have God you have everything. The more I read the bible and sing songs of praises, the more it helped me forget my troubles and pray to God. I also said to myself that if I have life I have everything and with God all things are possible. From that time also I read bible a lot and was encouraged from the biblical stories of Sarah and Abraham and Hannah and prayed to God. You just replaced their names with yours and ask God to help you for a miracle to happen as He did for them.' **…. Francisca.**

Mavis spoke of her faith or religious practices to cope and draw strength from the painful experience after the failed IVF treatment:

'My husband encouraged me by saying, "Why should you be crying over this, we will go again, don't cry, I will do my best for you to also get your own baby. I will help you, so even if you get one, it's enough. God was also the source of my consolation in that it is God who provides children and I believe in His own time he will do it. Again, praying to God helped me to manage and cope with the stressful nature of the procedure.' **…. Mavis.**

Juliet recounted that the *essence* of faith used as a powerful and unique force help to support her sense of self during that trying time:

'It has really made me spiritual; I have to go to revivals and pray to God, especially when I had the unsuccessful IVF treatment, I was really sad, and I ask God what sin I have committed. Why has God forsaken me? Since I have tried everything, but it turns out futile, but someone will go for the first attempt and she will be successful, and I was discouraged because I had prayed enough but nothing good comes out of it. I decided to not to pray again; I gave up; I am fed up. My husband will say Juliet don't let us lose faith in God even if you are fed up with prayers and has lost faith, I will not lose hope I will continue to support you in prayers. It shall be well in God's own time. Now I have started praying again and looking up to God for a miracle to happen.' **…. Juliet.**

Hope

The women were hopeful, and they tended to be quite optimistic about the potential for a successful conception. The participants experienced cycles of high hope and profound sorrow over repeated unsuccessful treatment cycles. They expressed feelings of high hopes when undergoing the treatment (IVF), hoping it to offer them a solution to the mother world.

Francisca was hopeful when she began the treatment, she gave up her all to prepare herself to be in her best situation for the procedure knowing it will yield positive result.

'When I started with the treatment, I was very hopeful. My husband assured me that this one would work for us. I had also heard from people who were successful in their first attempt. So I was very hopeful and believed that it would work. I worked very hard to prepare myself to be at the optimal condition with the hope of getting pregnant.' **…. Francisca.**

Juliet was hopeful and optimistic for a successful conception:
'When I began the IVF treatment I was hopeful. I was happy that the IVF treatment was there, and I am going to have my own child, I was happy. When I went to the hospital and the doctor said o! IVF may help you raise your own baby I was very happy since it gave me the hope that I can give birth to my own child. When I had the eggs too still, I was happy and optimistic because I was able

to produce something, it made me feel like I am also a woman. You see when you come across successful mothers you tend to be happy because you know there is hope for you and it shall be well.' **…. Juliet.**

Juliet expressed her feelings further:

'When I went to the hospital the doctor said ooh! IVF can help you raise your own baby I was very happy since it gave me the hope that I can give birth to my own child. When I had the eggs too still I was happy and optimistic because I was able to produce something, I felt like I am also a woman who can give birth to a healthy child.' **…. Juliet**.

Isha expresses her feelings:

'From the beginning when I was going to do the IVF treatment I was overjoyed. I was very hopeful that "Insha Allah!" it shall be well. I was also praying for the success of the procedure and was very hopeful it shall be successful.' **…. Isha**.

Lois was very optimistic that she was encouraging her fellow women who were also in the same situation who had lost hope and was not sure about the outcome of the procedure:

'I had to cope with the cumbersome treatment because I needed a child. When I went to the hospital the doctor suggested IVF treatment. The staff at the clinic also encouraged me to go for the treatment as they were very optimistic the treatment will work hoping that I will fall pregnant and subsequently give birth to a bouncing baby so I was very happy. I was even encouraging my fellow women who were also there for the treatment and were afraid and was not sure about the outcome of the procedure.' **…. Lois**.

Further, **Isha** shared that the side effects of the treatment mimicked some of the symptom's women experienced during pregnancy. This gave her a sense of hope, that the treatment was a success and she was pregnant:

'I was very hopeful that it shall be successful. Also due to the feelings I felt in my body I thought it would be successful because I have been pregnant before, so I knew the symptoms of pregnancy. At certain times I also felt happy because of the symptoms I felt I knew there was a change in my body because when I got pregnant some time ago. I had the same feelings, so I was happy. I was looking pale so when I stepped outside to go for the injection someone can ask me that "Ei! Why do you look so pale?" So, I got excited by that because I thought it was going to be successful for me and this has to mean something. I was nervous on the day of checking the pregnancy test, and also happy because I thought I was pregnant.' **…. Isha.**

The symptoms were simply an effect of the medication. By being deprived of conception (despite experiencing the symptoms), **Isha** endured feelings of disappointment and inadequacy.

Akos believed that even though she learnt that the treatment is not 100% successful, she hoped that the 50% chance could be her portion:

'Although I had in mind that the outcome is 50%, it was just a big blow because after waiting for 5 years and realizing that it was 50%, I still believed that the 50% was highly probably. I thought that the 50% chance will be my portion. It was not easy at all emotionally. I realised that I had reduced in weight, but I knew that there was more ahead, so I had to overcome and move on. I don't know how I coped. I took condolence in the bible and the advice from my husband.' **…. Akos.**

Sub-theme: Non-disclosedness

In this study the women were challenged as to whether to disclose their IVF treatment to individuals during the phenomenological conversation. All the women in this study endeavoured not to disclose or chose not to share their IVF journey to their friends as well as their families as many people in Ghana do not understand IVF treatment. Whilst for others it was a taboo; fallen into a society where motherhood is a norm, revealing their treatment journey to any other person may prove difficult and stigmatised apart from very few close family members. They also feared that people will call them name and looked down upon them that was particularly an obvious reason why they decided not to disclose their IVF treatment struggle.

Akos said:

'The truth is I don't tell people what I do and to what extent I have gone not even my parents. Sharing a lot of your personal information with people will create the opportunity for them to ask a lot of questions about you. When I started the IVF treatment, I did not tell any close relation I only told my mother about my intention of going to do IVF treatment.' **…. Akos.**

Francisca decided to conceal the IVF treatment to avoid being the target of gossip:

'People gossip a lot. You know this procedure people do not believe and accept it and really understand it and talk too much so we decided to keep it a secret to avoid any misunderstanding.' **…. Francisca.**

On the other hand, **Juliet** decided not to disclose her IVF treatment struggle with any other person because she felt it was personal issue:

'The thing is this procedure [IVF treatment] *when you undergo it you can't inform anybody what you are doing since it is a very sensitive and personal issue, people talk a lot and then people don't accept this kind of procedure. The acceptance is low. It was between only me and my husband actually.'* **…. Juliet.**

I asked **Juliet** the reason why she did not disclose the IVF treatment to anybody. She retorted:

'They don't believe in test tube babies. People wonder if a test tube baby would live a normal life. They don't know enough about it. When you undergo this procedure, it becomes difficult for you to discuss with friends because of lack of knowledge people have about it and the stigma attached. People usually think that individuals whose husbands have low sperm count are the ones who undergo IVF treatment.' **…. Juliet.**

Isha stated that she only disclosed the fertility treatment to women in a similar situation she met at the fertility clinic to support and encourage each other, and also share ideas:
'When we were going to do the IVF treatment, we did not tell any family member and friends. When we [My husband and I] *decided to do the IVF treatment we didn't tell anyone. It was between only me, my husband and God, that is all. So, there isn't anyone we informed apart from only those I met at the hospital which we made friends with, that's all. There is no one in this house who knows that we have gone to perform IFV treatment. Even when I sit in my husband's car to the hospital for injections and transfer, we did not inform anybody of our where about, there is not anyone who knows that something as this was going on.'* **…. Isha.**

Sub-theme: Guilt and Self-blame

This lived experience sub-theme 'guilt and self-blame' emerged from one of the phenomenological conversational prompts: How has been your experience with guilt and self-blame?

Some of the women expressed guilt feelings because of prior sexual practices, or lifestyles that they believed helped contributed to their suffering, others feel guilty from no specific source. For some of the women, unsuccessful IVF treatment is often perceived as a deficiency in the body and, others said as a punishment for prior sinful acts. Whilst some accepted the failure as bound to happen, others were blaming themselves.

Juliet was wondering if she was not a woman and did not understand why she was suffering like that as a young woman. She felt she has been denied *authenticity* of what every woman is expected to do:

'As for guilt that was the first thing that came into my mind. I feel guilty since, I can't produce for my husband and this weighs me down. I was wondering if I was not a woman. Because everyone does it and it was successful. Why? Am I also not a woman just like any other women who get married and become pregnant? Why am I suffering like that? I am really tired! I feel like half a woman. What sin have I committed? I had already heard that if you are young it increases your chance of becoming successful, but it wasn't working for me alone. I was wondering about the sort of problem there was with me and if someone could do something about it for me but there was no solution. The doctors don't know what goes on during implantation. They couldn't do anything about it. It was just like let it go and leaves the rest in the hands of God. So, we are depending on miracles to do the rest since the doctors have tried their best.' **…. Juliet.**

Akos has also experienced guilt feelings and sometimes blame herself for not preparing adequately before undergoing the IVF treatment. She recounts her experience:

'Sometimes, I do blame myself; I thought that I could have done better before starting the process. I could have taken some medicines to help prepare my womb first before the beginning of the procedure because I failed to do that, I had a negative result. I need to take all these things into consideration next time when I want to start the IVF process again.' **…. Akos.**

She explained further:

'I do not blame the hospital so much because after they transferred the embryos, they have no control over it, from the little research I did, and it was my body that was to react with the transfer. That was how I overcame it. I didn't have to blame somebody for my systems inability to react well with the transfer. That was the notion I got. I blamed my system for not reacting positively with it.' **…. Akos**.

Mavis and **Francisca** expressed similar experiences. They blamed themselves because of their lifestyle when growing up and felt guilty because of prior sexual practices some years ago.

Each shared their experience as this:

'I feel guilty because my husband is interested in kids. I feel so guilty for not able to fall pregnant. I also blamed myself that my body can't respond to the IVF treatment. I for one I have done abortion on two occasions and sometimes feel guilty and blame myself that it might be as result of the abortion that is why I am experiencing this problem.' **…. Mavis.**

Francisca expressed that:

'Negatively, I was disappointed; my husband too was disappointed I was wondering why God will allow this to happen to me. Even if I have sinned, I asked for forgiveness and the bible says if you confess your sins, He will forgive you. So why is this happening to us?' **…. Francisca.**

Isha and **Lois** expressed a different opinion:

Isha said:

'Not really, I did not condemn myself at all. I accepted my faith.' **…. Isha.**

Lois also had a diverse view to share in relation to guilt and self-blame. She expressed her sentiment**:**

'I do not blame myself as I did not understand the procedure, so I even inquired from the doctor about what led to the failure, but he told me that there is no substantial course as to why the pregnancy was not sustained. He could not explain what particularly caused the failure. He said it has a whole lot of associated factors. But sometimes I feel guilty for disappointing my husband for not able to give birth, but didn't blame myself but feels angry.' **…. Lois.**

Lois explained further that she got married as a virgin and never did anything awful to deserve whatever she was going through:

'What saddens me was that I was a virgin when I got married, and I have been trying fertility treatment to help fall pregnant for 12 good years but to no avail till I got pregnant last year and lost it in the third month. Then I went for this IVF treatment hoping that with all this numerous injections and luteal support all will be well. And then I have prayed to God for all this while, thinking that God is going to help me but that was not the case.' **…. Lois.**

Reflective note after fallen pregnant and entered motherhood during the study which I shared with participants:

Journal Entry Sunday 24th November 2017

Half-way during the study, I experienced twofold events in my life which I decided to share with the participants. During the stage of the interpretive phenomenological process, I fall pregnant and entered motherhood. I have gone through significant challenges and shed many tears and grief but through it all I trusted God. Occasionally I felt lonely but in my solitary periods of painful experiences and ridicules, God made a way and blessed me. I thank God for the storms, and valleys, experienced as this made me stronger a person. Herein my weakness you found me falling before your throne. You offered hope when my hearts had hopelessly lost the way.

There were also mixed feelings as I had to mourn my uncle and at the same time, celebrate a successful motherhood. I had the chance of living the experiences of unsuccessful and successful IVF treatment. Information gathered from the motherless during the conversations, helped me consider and then lived my personal experience, where aspects of my experiences resonate with the participants experiences. Whilst listening to the participant's narratives and during the interpretive process, a revelation of my own struggles and challenges at a point was unavoidable.

It was also necessary to make every effort never to lose sight of each participant's story and context. I had to examine myself and my reactions and play the researcher's role and stay true to the phenomenon under study safeguard participant's stories.

However, having lived my own experience of unsuccessful IVF treatment helped me to understand the physical and emotional challenges experienced by the participants. This was helpful in approaching the participants' information acquired during the interpretive process from an insider viewpoint. My experience enabled me the opportunity to give a voice to the women who are motherless as an interpreter and as a researcher. My opinion offered me a richer opportunity to enhance my interpretation; nonetheless, I became more cautious during the phenomenological conversations and also during the feedback sessions, and when interpreting and analysing the information gathered. Falling pregnant gave the women hope of fulfilling their dreams of motherhood and coped with pressures of IVF treatment. This also provided an understanding that influence the interpretation of the phenomenon under study.

For instance, in my experience, it was difficult not to become fond of the participants and occasionally our relationship strayed into something more approaching friendship. Nonetheless, I found myself able to combine empathy with professional detachment throughout my encounter with them.

Mode of *being-Inauthenticity*

Lived Experience Theme: The Vulnerable Self (The *they* self [*das Man], thrownness, and fallenness*).

The lived experience theme of the vulnerable self-emerged from the participants' description of feelings of loss of and personal control over their bodies, treatment outcome and fear of futility of efforts. This related theme refers to three Heideggerian perspectives–*das Man, thrownness* and *fallenness*. Heidegger describes *thrownness* a mode of *being-in-the-world* which is characteristic of *Dasein*. *Thrownness* refers to a way that an individual finds herself in a situations beyond which we have no choice. Heidegger states that, *Dasein* is characterised by its *thrownness* as, it finds itself always in a world. These women felt a sense of vulnerability with healthcare workers, family, and friends especially because the result of their pregnancy test was completely out of their control. The main sub-themes identified are: (i) painful experiences; (ii) loss of *being-itself-in-the-world* and (iii) sense of grief and profound loss.

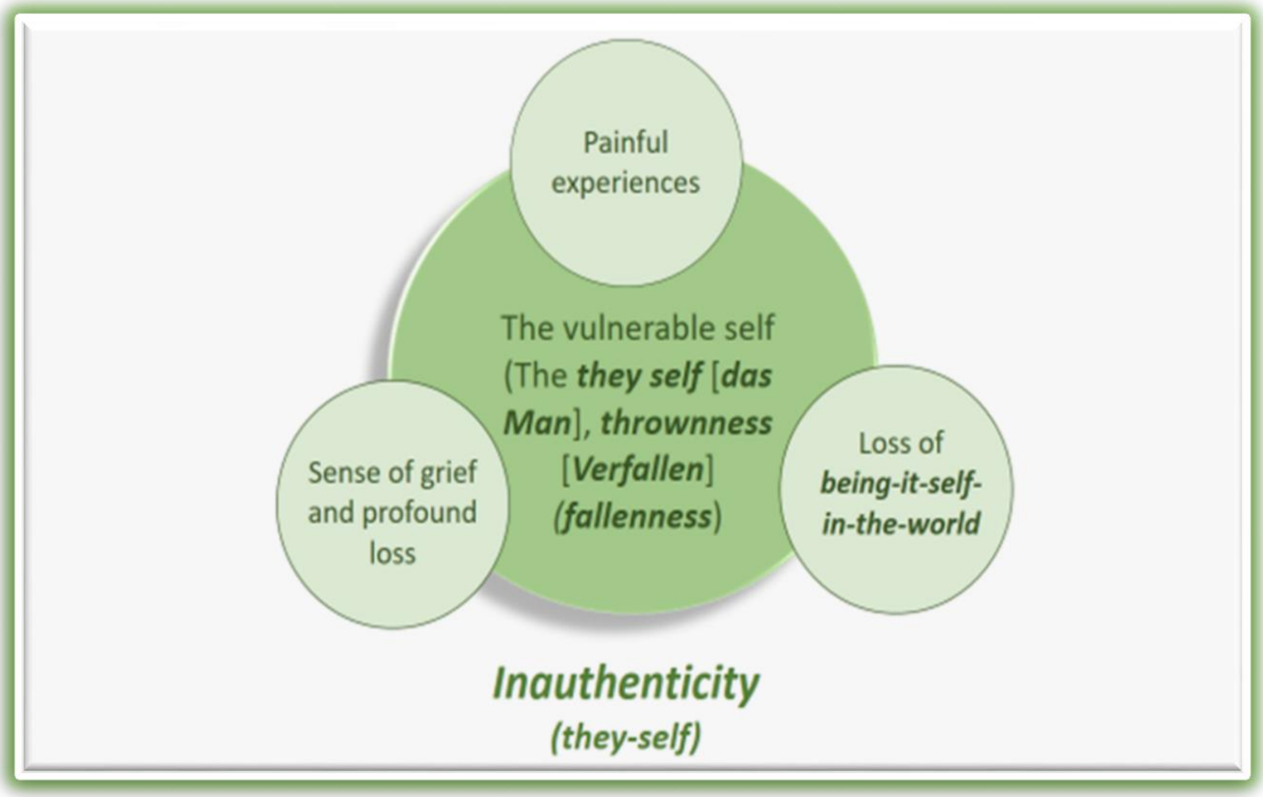

Figure 5: Thematic engagement of the relationship of the sub-themes Lived Experience Theme: The Vulnerable *Self*.

Major Lived Experience Theme: The Vulnerable *Self* (The *they self* (*das Man*), *thrownness*, *and fallenness*)

Sub-theme: Painful Experiences

Pain is a sensation attributed to living *entities*. This sub-theme describes how the women perceived the IVF treatment. The women recalled that the procedure is stressful and involves intrusive and a journey of physical and emotional pain which insensitive to their needs and feelings. They also described the two weeks waiting period as the most stressful events in the IVF journey as they were uncertain about the outcome. These tedious treatments also aggravated the women's' struggles over the issue of bearing a child and affected their daily routines greatly.

Physical Pain

Undergoing IVF treatment was described by the women as a stressful life experience, due to the physical pain of extensive and intrusive treatment which also had effect on the women's quality of life. Factors contributing to these feelings include pain and discomfort of the injection, their possible side effects of medication; time consuming procedures as well as disturbances in body image and self-concept for which they have no control. All the women reported experiencing physical pain in during the procedure.

Mavis bitterly shared her experiences as follows:

'Hmm…! [Sigh] *As for the IVF treatment* [injections] *it is too painful, eeh! As for this they should do something about it for us because you will be injected for too many times and you get hardened buttocks and you feel pains, and minor cracks on the skin. The injections are too many. Hmm! IVF, eii!* [She exclaimed] *As for the injection when you talk about it you can cry and cry as if you are mourning for a dear one. It is painful; they should change it for us. If they change it into a form of tablets for us it would be good. Eii!* [She exclaimed] *As for the injection, it's too much, it's too much, and it is really much* [feeling sad].**'…. Mavis.**

Isha experienced discomfort during and after the IVF treatment procedure. She expressed her feelings about the process:

'When I started the injection, I really felt pains in my breast, and it was as if I was about having malaria. When the eggs were transferred, I still felt pains in my breast, lower abdomen, and I also experienced severe waste pains till two weeks when the pregnancy test was done for which it came out negative. I also experienced pains and side effects of the drugs after the unsuccessful treatment. I felt pain at the injection site. I also feel pains in one of my thighs.' **…. Isha.**

Isha describes her pain further:

'I still had pains as result of the numerous injections that I was taken. Ever since the treatment I had been spiking temperature, I sometimes feel weak and lost appetite, I feel pains in my breast, and the injection too was painful. I feel pains in one of my buttocks as I'm seated. Up until now, it is swollen, it is hurting. I bought an ointment and massaged it with it but still it is really hurting. Now it has affected one part of my buttocks, one of my buttocks is swollen and is hurting. I can't sit on my buttocks. The injections were too many and painful.' **…. Isha.**

Beside the physical pain of the treatment the women also experience negative side effects of the medications. **Mavis** who had experienced complications, recalled:

'The injections are too many by the time you take a number of them all the flesh on your buttocks would be hardened and swollen so you have to be injected on the hardened area just like that. So, they should do something about it for us because the injection is too intimidating.' **…. Mavis.**

She further expressed that the injections were killing her slowly:

'During that period, I lost wait, I looked pale and at times you feel irritated, burning sensations, my skin peels off and you don't feel good all because of the injections. The injections were killing me slowly.' **…. Mavis.**

Akos equally described similar experience that the injections she took affected one of her leg and could not walk properly as she lamented:

'The physical aspect is the pains as a result of the injections. I was having pains at the place where the injections were taken, the buttocks and the arm. Even the injections I took on my buttocks affected my leg. I had a problem with one of my legs. I couldn't walk properly with one of my legs.' **…. Akos.**

Several women described the oocyte retrieval as challenging, stressful and a painful procedure. It is accompanied by lengthy period of recovery as a result of fatigue, severe waist pains, and loss of appetite.

Francisca expressed the following:

'With IVF hmm! [Paused for a while]. *The stage that I would say is very challenging is the retrieval of the embryos. During the procedure you are sedated but when you wake up, the pains are usually unbearable. It feels like the pains you have after an abortion and you also feel something heavy has been taken from your body. The transfer was however not difficult and painful as in the case of the retrieval of the eggs. They advised we stay away from work and have a lot of bed rest.'* **…. Francisca.**

Juliet had similar experience:

'During the procedure too, it was stressful because going through minor surgery to pick up the mature follicles from the ovaries and taking the anaesthetic drug, it was stressful. Afterwards I had severe waist pains, vomiting and lost appetite. After the egg retrieval the drugs that you will be put on; especially with the injections it was painful. I was so tired and could not get out of bed for the whole week because of the pains.' …. **Juliet.**

Akos was wondering how they were going to retrieve the fertilised eggs because she did not have any idea what was involved in the process:

'On the day of the egg retrieval, I was wondering how they were going to do it because I had no knowledge about what is involved during the process. Before the eggs are harvested, another injection called [the trigger] *was given in the night. Although I was afraid, but I was eager to do it because I wanted to be a mother, so I decided to do it. I was given a drug to induce sleeping to avoid experiencing pain but after the retrieval, I had little pain at my lower abdomen and the whole night was traumatic. But I took it normal as the counsellor explain it, I took some pain killers and I was fine.'* **….. Akos.**

Emotional Pain

Undergoing IVF treatment is a highly emotional life event. In addition to the physical changes, the women expressed intense emotional pains and distress when sharing their experience. Most interestingly, the women expressed a variety of negative emotions such as sleep disturbances, frustration, disappointment, feeling of sadness and anxiety and some even cried in the course of the conversation. The participants expressed with intense emotion that infertility and its treatment were extremely demanding and exhausting experience.

Francisca described how infertility and going through IVF treatment affected her *essence* of living as a woman and voiced out the emotional trauma she had to go through in the course of the treatment process:

'It affected my emotions too; it really changed me. I easily become angry with little provocation because of the painful memory of the injections. It is very painful; I am afraid of needles, so I sometimes close my eyes when I am taken the injection. Sometimes when I open the refrigerator and count the number of injections left, I become alarm. I was wondering and ask myself eii! Am I supposed to take all these injections? When will all these injections going to get finished? [Looked sad, about to cry] *but because I needed a child I had to endure. It was very stressful and painful when I thought about it and was worse than any potentially life-threatening condition.'* **…. Francisca.**

Mavis also takes this opportunity to voice out the emotional suffering she had to go through throughout the process:

'The emotional trauma you go through is also a challenge. It deceives us a lot; you will exhibit whole lots of signs and symptoms as if you are pregnant. You will be weak, as if you are pregnant, but when you do the pregnancy test, you receive negative results. When people see you, they inquire; "Why, are you pregnant?" because sometimes you would look pale but when you check the result it is negative. It isn't easy during this period at all, you go home sorrowful and you call some of your friends who are in the same situation cry and later laugh over it.' **…. Mavis.**

Juliet expressed her worries:

Invitro fertilisation treatment is emotionally challenging. I had to think about it a lot because the procedure was new. I was thinking about the outcome like what will I feel because after everything that I have gone through if this treatment was not successful what will I do? That was all that was going through my mind.' **…. Juliet.**

Lois expressed her feelings:

'Emotionally; it has disturbed me a lot. First, I am not a happy person, anytime I think about it I become extremely sad and heart broken. The experience is frustrating and painful.' **…. Lois.**

During the period when the women waited for the results of the treatment, they were anxious and uncertain about outcome of the pregnancy test.

Akos expressed her fears about the outcome which might not be favourable and describe the two weeks waiting period for the pregnancy result as facing an impending death sentence:

'I stayed in the house all throughout the period. A lot of times, I had negative thoughts as to whether the treatment was going to be successful relating to the amount of money spent on the IVF treatment Ah! Someone advised me to read a book during the 2 weeks of waiting for the results. So, I read a book and engaged myself in church activities to reduce the stress. But it was still not easy, most times instead of resting and having positive thoughts, it was always the negative thought that filled my mind. It was like as if you have been diagnosed of a chronic disease and waiting for death sentence.' **…. Akos.**

Akos continuous with her story. She further described the ways in which anxiety and stress pervaded her life when she was going through the procedure:

'I was anxious to know the result. I was eager for the two weeks wait to come quickly because; I wanted to know the results very well. The two weeks waiting was like waiting for one year. Because, every day, I was thinking how the outcome will be like, was it going to be successful? Is it going to be successful so that my joy will be complete? Is it successful? And then unfortunately getting to the

two weeks I started bleeding, so I went back to the hospital and the doctor made me rest until the pregnancy test was done but unfortunately it was not successful. In fact, I was very worried, I thought everything was well and I believed God was on my side. I was disappointed and did not know what to do. I lost hope, I lost all hope, and I cried a lot because I believed that the IVF process will be successful but unfortunately it failed.

Financially, I even took some bank loans before I could go through this process. My husband also supported me and it affected him financially. He had problems at work because he had to report to work late for driving me to and from the hospital, so the time also affected him. I had to pay my debt and that is what I am doing now. I am paying my debts.' **…. Akos.**

The women also expressed mixed feelings and reactions concerning the IVF treatment experience. Most of them said they could not sleep as they were worried about losing the transferred embryos and possible implantation failure.

Juliet shares her experience:
'First time if you hear about IVF you feel happy but the outcome during the two weeks waiting period you feel nervous and gloomy. It is a mixed feeling; you are happy at the same time sad and pessimistic. You can't have a sound sleep and you always have thoughts of it; you want to feel something within you. You will sometimes be thinking is the foetus growing, what is going on in the uterus. My husband will also put pressure on me; even if he had travelled, he will call me and ask Juliet, do you feel some lower abdominal pains? I will jokingly reply gentleman what is it? Do you want me to hear it by hook or crook? It was like every blessed day you have a deep thought. You tend to read a lot from the internet during the two weeks waiting just to keep yourself busy and to forget about it. It was difficult to think about anything else except the possibility of becoming pregnant. Sometimes I become confused as to whether the embryos had "Falling off" when I urinate. You become even more worried when you don't feel anything in your abdomen since it's a sign of implantation [feeling sad]*. Hmm I have suffered ooh! IVF is emotionally challenging.'* **…. Juliet**.

Mavis expressed her feelings as follows:

'The day of the embryo transfer I felt so happy and also sad. Why am I saying you will be sad? This is because you will be thinking about the outcome. Is it going to be successful so that your joy will be complete? You know, all the time you will be thinking about it. There is never anyone who would say she would take her mind off during that period. I for one, I was not able to sleep; I was not able eat; it really entails thinking. So when I come for the injection you realise that I looked a bit pale, I lost weight, it does entails a lot a lot of thinking. Its more than anything, there is a lot of thinking during the two weeks waiting period. I was anxious and waiting for the outcome of the results. You can't focus on anything especially the day before the pregnancy test. The two weeks waiting period is a roller coaster of emotions.' **…. Mavis.**

Isha expressed similar feelings:

'Emotionally I was anxious. After the embryo transfer, I rested for about two hours in the clinic and the nurse came to discharge me to go home. She [the nurse] *told me to see the counsellor for further discussion. The counsellor also told me to come and do the pregnancy test after two weeks. From that time, I became nervous I was thinking it would either be successful or not, unless Allah intervenes. It wasn't easy at all and was having nightmares I had entrusted all in the hands of Allah that he should do it for me. I also felt happy because of how I was feeling. As for the two weeks waiting period, I was anxious, nervous and happy at the same time.'* **…. Isha.**

Several of the women complained that due to the stressful nature of the treatment and the treatment regimen had led them to gain weight during and immediately after the procedure.

Francisca, complained that the drugs had changed her skin condition, in addition to the scarring and pains caused by repeated injections.

'As a very fair person, the injections discoloured the fair skin on my buttocks and also sitting down became a problem, so I mostly slept on my side because of the pain. If I open my buttocks to you, you will see that it has really affected my body image. It is not easy at all.' **…. Francisca.**

Lois complained that she had gain weight due to the adverse effect of the medication:

'Physically; it made me fat. When people see me, they tell me I have grown fat. I really do not know whether the quantity of food I was eating during the treatment or as result of the drugs. I have become fat. Also, because of the injection I used to feel some pains in my buttocks. The injection was very painful.' **…. Lois.**

Mavis was sad and became teary in the course of sharing her experience as she reveals the ordeal she went through during the procedure. She feels she has been denied *authenticity* for not getting pregnant in the natural way:

'Sometimes after I have been giving the injection I would be crying and be feeling sad. When anyone gets pregnant, she doesn't take injection but as for me alone before I would get pregnant, I would have to take injections for three months. It is painful, you feel sad at times, and I cry a lot, I cry and get over it. As for that no matter who you are, when the time for injection is due you will become apprehensive, that is how it is. Sometimes I say, "Eii! If God had blessed me with a child naturally, I wouldn't have gone through this procedure by taking so many and painful injections like that", then you feel sad, [started crying]. *I then paused for a while; offered therapeutic touch and support.'* **…. Mavis.**

I paused for a while and I asked **Mavis** if she is well to continue the conversation or suspend it for a moment. I offered therapeutic touch and support for few minutes then we continued with the conversation.

Her story unfolds further:

'Let's continue hmm! [Sigh] *It's a big problem ooh! Hmm! IVF, eii!* [Exclaims]. *As for the injection when you talk about it you can cry and cry as if you are mourning for a dear one* [was silent for a while]. *It is painful; they should change it for us. If they can change it into a form of tablets for us it would be good.'* **…. Mavis.**

Sub-theme: Loss of *being-it-self-in-the-world*

The women felt that they have lost their self-identity and confidence, due to the fact of their inability to give to give birth to one's own biological child as a woman. *Fallenness* is the loss of *being* itself (making things intelligible) through everydayness of the *they (das Man*). The women were vulnerable when they complained about losing control over their personal lives due to the challenges imposed by the treatment to fall pregnant. They were also vulnerable in the sense that they had no control over their bodies to respond to the treatment and fear of the possible failure of their efforts as they struggle to come to terms with the loss of that future life goal.

The women complained that they experience hardship and stress during the treatment process following the second conversation.

Lois narrated her story with sadness:
'For me not having children was not the future I had imagined since I was a virgin when I got married. I never thought of ever struggling with conception of a child. I also feared that I could not succeed for the third time. The pressure was too much to handle. I was very frightened and disturbed when the result came out negative, but you don't have control about the outcome and the doctors could not give me specific cause of the failure.'**…. Lois**.

Juliet had this to say:
'*Oh, in the beginning, I thought that, I had a very good chance because of my age. The doctor assured me that, since I was young there is increased chance for success, but this was not the case. I was hopeful to succeed since I was young as the doctor said, I made every effort to adhere to the treatment regimen but after I had the negative results, for the second time, I was wondering why. I could not do anything about as body did not respond to the treatment. You don't know what caused the implantation failure. What is causing that? So, I was doubting whether the next cycle would be successful. Because if the first and second wasn't successful, what shows that the next cycle will be successful? It was a big blow to me, and I asked myself what I will do if I fail in the future. I was really frightening.'***…. Juliet**.

Juliet continues with her story*:*

'The IVF procedure was stressful because of the injections that I was taking on daily basis and driving to and from the hospital. My husband also had to go through this kind of stress because he was also asked to do some screening and had to bring out his semen for the treatment to commence. It was stressful for the both of us.' **…. Juliet.**

Heidegger states that, *Dasein* is characterised by its *thrownness*. This is because, it finds itself always relating with the world. The participants were *thrown* to a *world* of infertility where they had no control by going through painful and stressful IVF treatment in order to fulfil the wish of becoming mothers. *Thrown* into this *world-of-motherless*, they adapted themselves by creating their *existence* (*Existenze*) by seeking IVF treatment with the hope of belonging to a *world-of-motherhood*. Attuned to the IVF process, the women *comported* themselves well by going through the tedious IVF treatment without a choice. The women were *thrown* into possibilities of either being pregnant or not which was out of their control.

Lois expressed her feelings:

'The whole IVF process was demanding because of the drugs and the injections you would have to take. The injection was too many. You will have to take the injections every day for one month before the transfer. The injections you take before they do the transfer are a lot then after the transfer too you will continue with the injection for a while. It was the injection that made it painful and stressful but after you fail, you feel the pain more and it is like a feeling of emptiness. Every day you will be exposing your body during the injections and at scans but in the end all your efforts go down the drain. It is kind of hard and uncertain future.' **…. Lois.**

Lois is disappointed and has lost hope. It appears she has given up on the idea of having her own biological child:

'When the treatment failed, I asked the doctor what caused the implantation failure and I was unable to get a definite answer about the treatment failure. I feel empty within me and I could not do anything about it. I am very much disappointed and has lost hope. I have given up on the idea of

having my own biological child and I dare not enter the treatment cycle again since I don't have any more embryos place. I am confused and I don't what to undergo another cycle again. Enough is enough I have done my best.' **…. Lois.**

They experienced what they describe as role failure. **Francisca** expressed helplessness and a personalised sense of failure when faced with unknown outcome of the treatment. She was of the view that the procedure was very intrusive and has less control and felt like she failed. This left **Francisca** notably vulnerable as illustrated below:

'For me it was very stressful. In the beginning I thought it was easy just like having an intercourse with my husband. I thought they were just going to take my eggs and fuse them with my husband's semen and that is it but I realised it was more than that. I tried everything possible to endure this hardship since I had no choice, but I still did not have control and power over the outcome. For me after experiencing two failed IVF treatments *I felt like I have failed my husband and family, and do not even have an idea what the future holds. What is wrong with me?'* **…. Francisca.**

Reverberating the statement of **Francisca**:

'Why am I struggling like that? I don't understand. Why am I going through this kind of situation and be like every other woman, even I have committed abortion previously I have asked God for forgiveness. A lot people have had series of abortion, but they are able to get pregnant without much effort.' **…. Francisca.**

Juliet who had been diagnosed for four years share her story about how being infertile affected her role as a woman and wife. As explained by her, the experience of infertility and subsequent treatment affected her *essence* of her world, and she feels like half a woman of not being able to produce her own biological child:

'I was wondering if I was not a woman. Because everyone does it and it was successful. Why? Am I also not a woman just like any other women who get married and become pregnant? Why am I not getting pregnant just like any other woman? I comported myself very well during the procedure in order to achieve success. Why am I suffering like that? I'm tired! Of this life and feel like half a woman.' **…. Juliet.**

Invitro fertilisation (IVF) treatment presents a stressful and often traumatic experience a woman life will encounter in her life and failure in achieving motherhood can leave women feeling devastating. **Isha** recalled the treatment was hectic:

'The treatment [referring to IVF] *is very stressful and tiresome because of the processes you will go through throughout the treatment. From the beginning both my husband and I had to go through series of investigations which was hectic'.* **…. Isha.**

Juliet said:

'At times I do ask myself what meaning and purpose my life is about if I don't have children? Hmm!! What can I do? Sometimes I wonder if I don't have children, what is the meaning of my life on this world because children give you a reason for living. Who will inherit me, who am I working and struggling for?' **…. Juliet**.

Others described a kind of *existential* life crisis of *meaning* of their lives as reflected in the words of **Akos**:

'I was thinking why God failed me. I almost lost hope and meaning and purpose in life. If I am not able to conceive a child how will I make an impact on this world? You know, who should I leave my legacy with? It affected me in one way or the other. I had this feeling of emptiness and always fearful.' **…. Akos.**

The women also recounted experiencing sexual problems as a result of restrictions involved in IVF participation. As expressed by **Lois**:

'During the latter part of the treatment, the counsellor told us not to have sexual intercourse with our partners. After that, when I did the pregnancy test and realized it was positive, I bled a little so I had to stay away from any sexual activity. They even had to admit me for a week. After discharged from the hospital too I was still not fit. As for sexual intercourse we have not engaged in it since the treatment. I bled last week and this week my husband was around but because of the situation we could not do anything.' **…. Lois**.

Juliet had this to say:

'I think the two weeks abstinence from sex after the transfer is bad. Because I feel as far as the transfer has been done, you should be allowed to have sexual intercourse after one week.' **…. Juliet**.

Sub-theme: Sense of Grief and Profound Loss

All the women who participated in this study had experience sorrow. Grief reaction and profound loss was the fourth sub-theme. This was common with all the participants. Some of the participants reverted to crying, secretly with their partners, when the IVF treatment failed. When the treatment was not successful the participants also mourned the loss of an anticipated, expected future as if they have lost a dear one.

The women also stated that apart from the physical pain experienced the treatment also brought psychological and emotional problems in facing the loss of a dreamed-of child. Experiencing repeated unsuccessful treatment cycles had changed the participants' perception about the treatment, and many began to lose hope of future and important life goals as described in the excerpts below:

Mavis described her loss like this:

'*When the first IVF treatment cycle failed, it hit me very hard and I was so devastated. I cried a lots. It was like mourning the loss of a dear one, a whole grieving process. I cried and cried all day but nobody understood me.'* **…. Mavis**.

Juliet shared her experience of the intense pain of grief at the losses incurred which was both confusing and hidden:

'You have even made me sad." I was so sad and cried; I cried that that day. I couldn't even go to school upon hearing the news. I was confused and devastated. I was really hurting; I cried, I cried a lot for three days, but nobody could understand my pain. My mother came around to console me, my husband was also around to console me, but I could not handle it. I still needed someone to talk to because I couldn't take it alone, it really hurts me looking at the huge money wasted and the

*stress I went through then you come to hear a negative result. It's disheartening. I was not able to learn. I could not do anything. It was like also mourning the loss of an anticipated, expected future life goa*l.' **…. Juliet.**

Isha had actually shed tears when she said:

Oh! I was sad; I cried at the hospital, if I don't tell you then I'm cajoling you. [Wept bitterly] *When I came home, I cried again since it wasn't successful, I really cried because my husband and I had hope in the IVF treatment. And, presently it's hard to come by money. My husband works at the Prudential Bank, so he took a loan from there and that was our source of finance for the procedure. And I also added some little amount to it. So, after doing it and it turns out unsuccessful, if you pay money for it again, sister! It's painful, it was painful. In fact we were all hurt, after spending such a huge sum of money to do it and it turns out futile, it is so painful, it's painful but we later left it all into the hands of God because we don't have power and strength; it discouraged us but we left all in God's hands. I really think about it a lot, my husband also was discouraged and told me that now he is not going to invest much money in the IVF treatment again because he had to first settle the loan he took from the Bank.'* **….. Isha.**

The women expressed that hearing a negative pregnancy test result was the most distressing and painful emotional experience. **Lois** felt the impact of the loss and this affected her emotional well-being. She explicitly expressed it during the phenomenological conversation:

'It has affected me badly. It really hurt me and I was disappointed. Before I went there, I prayed a lot and did my best to get closer to God. I knew God was going to help me. Up until now, it has affected my prayer life. My prayer life has changed. I cried a lot. It was so difficult for me going back to work. Had it not been my sister's timely intervention I would have lost my job by now. I was very sad and cried a lot. It had really affected me and I am not a happy person, anytime I think about it I become very sad. I have not fully overcome it. I have lost hope, meaning and purpose in life looking at the huge financial cost and the intrusive procedure. It really hurts me Vida.' **…. Lois.**

The impact of unsuccessful IVF treatment on **Akos's** emotional state was explicitly expressed during the conversation. The intense pain of grief at the losses incurred was both confusing and hidden: **Akos** expressed her feelings:

It was awful and horrible and awful when the treatment proof unsuccessful; when it wasn't successful, I lost hope completely, it was like all my efforts have gone down to the drain though my doctor was encouraging me to do the second one. But I lost hope, and courage to undergo another one. Though I am planning to do another cycle in some years to come but right now I lost hope and I don't want to do it again. My husband encouraged me, cried the whole night. Since this was my first IVF attempt I was frightening and was surprised that the treatment failed. Even though I knew the procedure was not 100% successful, I believed there is still a hope if I try.' **…. Akos.**

She voiced her pain and grief further:

'For the first week, it wasn't easy though I was stressed off. I had to start skipping food and cried a lot. The counsel I got from my husband helped a lot. He constantly told me that there were other opportunities and methods available. I also spoke to a woman who had done it for seven times and was prepared to do it for the eighth time and realised that there was more hope. All I had to do was to gather money again and go for the next treatment. The grief never goes away actually, you feel like you have lost something you never had and it's so difficult to explain since nobody will understand your pain and the losses incurred.' **…. Akos.**

Finally, **Francisca** experienced vulnerability over the loss of her female identity. Over time, these disappointments became more difficult. **Francisca** said the grieving was hidden since she did not tell anybody about the treatment except her husband, hence nobody will understand their grieving:

'The pain was unbearable, it wasn't easy. The trauma was not easy. I cried and my husband cried too. When they broke the news to me, I believed that if I was alone at the hospital something terrible might have happened to me. It wasn't easy even until now; I have not fully overcome it. I cry a lot. *When I started the IVF treatment, I did not inform anybody except my husband so when you cry nobody will understand since we hid it from people. We both encouraged and motivated ourselves since we did not inform any of our families, so it was only the two of us who knew it. It was a personal*

issue between my husband and I so we grief over it. It was like a hidden grief. It was not advisable to tell a lot of people about it. My husband too encouraged me to be patient because God will do it for us so we should leave everything in the hands of God. You just need to have faith.' **…. Francisca.**

I also kept a research journal after I had finished with the first phenomenological conversations with the participants where I recorded my personal feelings about the participants' different approaches to their journey.

Journal Entry Friday 25th November 2016

I had finished with the first phenomenological conversations with the participants, and I have gathered adequate information. Mostly I was struck at how articulate and analytical the women are. Notably, all the participants spoke more frankly and openly throughout the conversations. The women started to cry and became sad during the conversation and that was my greatest challenge though. Hmm very similar to anyone grieving. There was the tension that I felt as the participants were sad and cried recollecting past events. I was tempted to give advice but that was not my duty as a researcher.to help them. Occasionally *they asked for advice on specific questions concerning IVF treatment and my personal experience of infertility.*

Interestingly, after the phenomenological conversation later in the afternoon, **Isha** *asked me if I knew what caused the implantation failure because she had become upset when the doctor refused to explain it to her vividly. She said, 'I think you can explain it to me well since you are a nurse.' Initially, I was confused about what to do. I was silent for a while. Surprisingly I was tempted to respond to her question but quickly realised that it was not my duty as a researcher to give an opinion. I explained to her that the purpose of my being there was not to make judgements about the doctors, that I was only there as a researcher. It was only the doctor who can explain it well to her since he is a specialist. She understood my position as a researcher with no ill-feeling. I felt relieved for her cooperation and understanding.*

Not all the conversations were as fruitful as I expected in the beginning. In particular, the conversations with **Lois** *and* **Akos***:*

For **Lois***, all the conversations took place in her home. She was anxiously waiting for me when I got to her house. The conversation was interrupted by telephone calls and loud music. There was a lot of noise in the house, which was not ideal.* **Lois** *felt so emotional when sharing her story. There was this feeling of deep sadness as I could sense from her facial expression as she narrated her story. Eventually, I managed to get the conversation going and felt excited after the conversation. I had rich information, though.* **Lois** *needed the doctor to explain to her vividly why the implantation failure but could not get answers to her problem.*

Akos *conversation took place in her office. First, there was the issues of call back. There was also interruptions and distractions by her subordinates. She felt a bit hesitant as she was going for a meeting. The conversation was conducted in a rush manner as she was in a hurry to attend an emergency meeting nevertheless, she had so much to say and I felt happy after the conversation. Getting* **Akos** *for the feedback sessions was not easy because of her busy schedules*.

I was mindful as to how to respond to their questions and avoided to offer advice to raise their hopes as I told them I was only researcher, and not a nurse. In the case when the women became anxious and distress, I reassure them therapeutically or offered them referral to the counsellor if needed. Keeping a journal entry also helped to reflect on this journey. Through my diary entries I became skilful throughout the research process.

It can therefore be inferred from the women’s conversation that the motherless have gone through painful experiences and endured intense pain of grief and profound loss.

Mode of *being-undifferentiatedness*

Major Lived Experience Theme: Living with Infertility *(being-in-the-world-of-motherless)*

This section describe the theme- Living with Infertility *(being-in-the-world-of-motherless)*. This theme describes the women's views about how living with infertility and undergoing IVF treatment has affected their everyday human *existence* of *being-in-the-world-of-motherless*. The three main sub-themes identified under Living with Infertility *(being-in-the-world-of motherless)* include: (i) disruption in projected course of life; (ii) *being* an outcast *in-the-world-of-motherhood and (iii)* reality acceptance of *being in-the-world-of-motherless*.

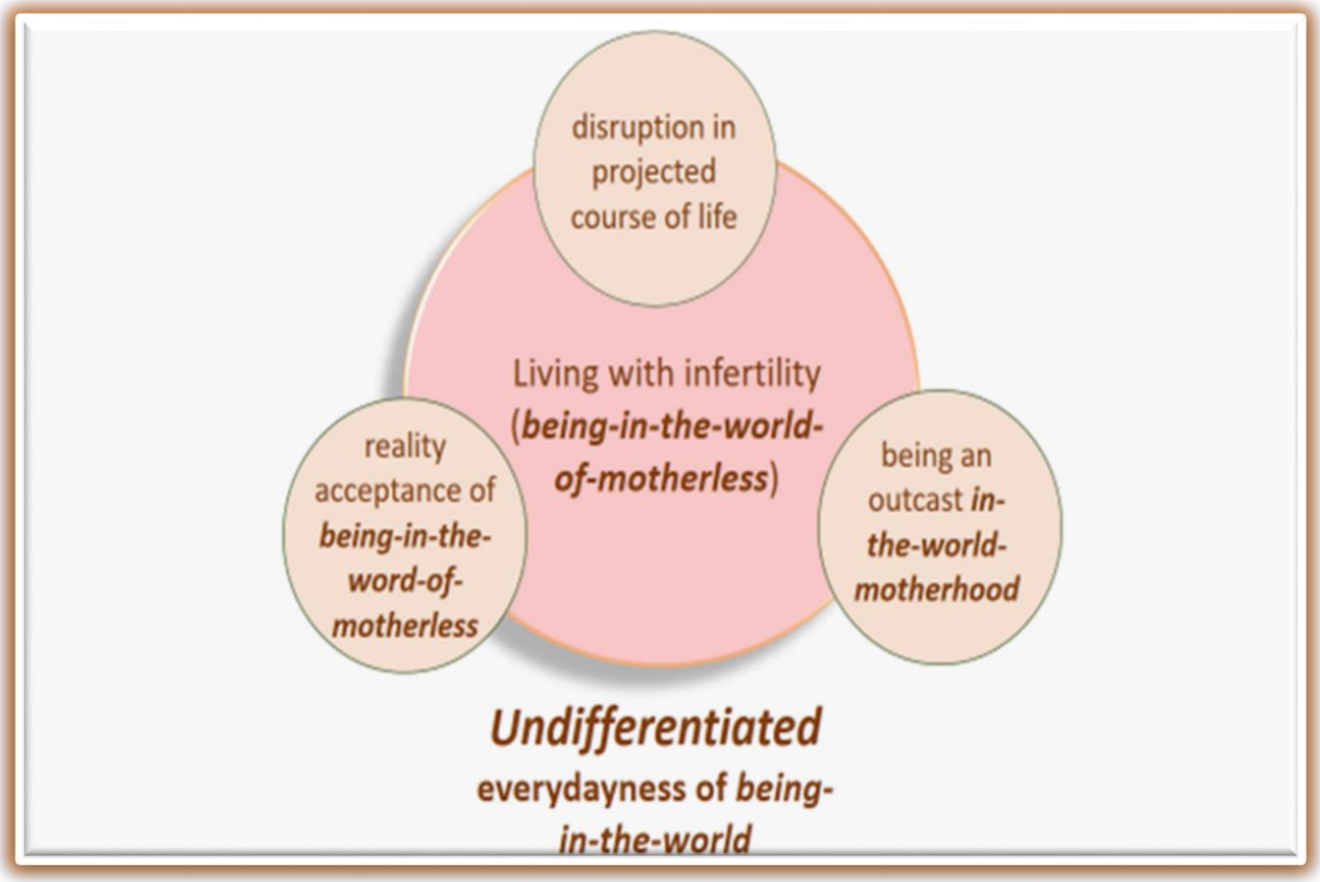

Figure 6: Thematic engagement of the relationship of the sub-themes of the Lived Experience Theme: Living with infertility *(being-in-the-world-of-motherless)*.

Sub-theme: Disruption in Projected Course of Life

The women stated that IVF journey interfered with many aspects of life, impacting on their work schedules, finances, personal well-being as well as key relationships.

Life on Hold

The participants spoke about the all-consuming nature of being on IVF treatment, and the way that it dominated their lives and left little time or psychological space to focus on other things. Some women said they just stayed in bed during the two weeks waiting time except to go to the washroom. Recurrent work leave was required, which contributed to loss of man and time from their jobs. The IVF treatment also had a major influence on the lives of the IVF service users.

Francisca spoke about the restrictions that treatment placed on her, such as advised not to do strenuous activities, drink or exercise.

'Some of the challenges I faced were domestic. The IVF treatment is different from the normal way of getting pregnant since with the IVF treatment you cannot do things on your own. Washing, cooking and doing things on your own becomes difficult. I just stayed in bed during that time and did not want to move around for fear of losing the embryo. Sometimes my husband had to skip work to stay with me because of the IVF treatment. Everything that I enjoy doing I had to stop and concentrate on the treatment.' **…. Francisca.**

Isha expressed her feelings:

'Some of the challenges are that, I wasn't able to wash my clothes, sweep, I was not able perform the house chores do anything, and it is my husband who helps me. I also stopped working before I went to do the IVF because it needed much attention. If you make up your mind that you want the thing [child] *you have to stop all that you are doing and involve your whole being because the thing is important to me so I had to stop selling and concentrate on what lies ahead of me. Because I was determined to become pregnant, I had to stop everything and concentrate on the IVF treatment. The IVF treatment is stressful, it takes time pertaining to drugs, injections, various investigations, it really needs time that was why I stopped working. My whole life was revolving around the IVF treatment.'* **…. Isha.**

The participants also described how the uncertainty of whether treatment would work made it difficult to plan. Decisions about one's career, housing and travel were postponed as the participants had borrowed huge sums of money to undergo the IVF treatment and needed time organising their life to go through the IVF process.

Mavis expressed her feelings:

'During my first attempt I closed my shop for three months and so I lost many customers. I made low sales, so during my second attempt and subsequent ones I decided to employ someone to assist me and take care of my shop anytime I had an appointment at the hospital.' **…. Mavis.**

Francisca shares with me her experience:

*'The treatment really affected my career. I have not been at work for three months and this has affected my commission. It affected my work. As a commissioned earner, the more days I stayed at home, the less money I got. It wasn't easy at all. In the end, your drugs expensive and costly, and you cannot rely only on your husband's support. Staying at home didn't really help me at all. You can't even think about...or plan anything tangible.'***…. Francisca**.

Juliet was forced to go on leave which didn't fit into her work schedule. This was better captured when she stated:

'I also had to report to work late since I had to go to the hospital very early each morning to take the injections before reporting for work and school. Sometimes too I had to skip work with the excuse that I was sick. I hate lying but I couldn't tell them about the procedure. Even after the procedure I had to take some bed rest so I was not able to go to work. I had to take my leave which didn't fit into work; since I couldn't' combine work and IVF treatment so I had to force and go on leave.' **…. Juliet.**

She recounts her story further:

'The road leading to my school was bad and I was contemplating whether to defer my course or stop schooling for two weeks after the transfer. I had to do both I had to rest during the week and go for weekend classes, but I used to drive slowly since I did not want to have any problem with the embryo.'
…. Juliet.

Akos also shares similar experience:

'Yeah it affected my job. Because sometimes you ask for permission, but the manager would be wondering why, you need such permission because you don't look like you are sick. You understand? You must lie and give some flimsy excuses. So, after the transfer I took a leave of absence from work. The procedure is very demanding and time consuming as well. Initially it affected my work. I was late to work since I needed to go for the injections before I go to work. Permission from the workplace was difficult for me because you must tell the manager you will report to work late without any tangible reason since I did not want to disclose to him concerning the IVF treatment. It did have a strong impact on my career. I had to take my leave which actually I didn't plan to do because I could not combine work with IVF treatment so I had to force to take my leave after the transfer. You have to put your life on hold as you don't know what's going to happen after embryo transfer.' **…. Akos.**

Sub-theme: *being* an Outcast *in-the-world-of-motherhood*

This theme emerged from a sense of the participants' loneliness of being set apart by *mother-world* and in the outcome of the failed IVF treatment and remaining motherless. The participants were confronted with their own ontological state of being infertile and going through IVF treatment. The particpants stated that they were seen as different for not being able to fall pregnant, as women. They talked about feeling left out of a world in which motherhood is deemed privileged resulting in being shunned and set apart by *mother-world*.

Upholding an *"unready-to-hand"* mode of commitment, the participants reported feeling uncomfortable and humiliated in social gatherings, especially when others knew they were motherless or when children were the subject of the conversation. Unfortunately, infertility generally remains a taboo in almost all parts of the Ghanaian community. Isolation became a common theme in that the participants felt other family or friends could never fully understand what they were going through emotionally, psychologically or physically.

Francisca preferred avoiding such gatherings as she recalled:

'Socially, I am not very sociable except you are very close to me. However, I have hardly attend to of functions relating to my loved ones. I cut back on socialising. I had to cut down social activities such as going for excursion, funeral, naming ceremonies and parties. And reduce some of the church activities.'…. **Francisca.**

Isha shares her story:

'Oh! [She exclaimed] *as for issues there are many of them, sometimes when you step out people will be staring at you. You know, as for we Muslims if someone puts to birth we go for naming ceremony* [Sunna]*. If you go, when someone see's you, the person retorts, "Eii! God should help you to give birth a year by now" I say oh! Amen. I stopped going for Sunna for some time. Sometimes too my in-law, hmm* [sigh] *my mother in-law, sometimes it's looks as if she is annoyed with me, I always lived in perpetual fear as my mother in-law can come here at any moment and start quarrelling with me and insult me concerning childbirth. "As for you, you won't give birth?" My husband's younger brother's wife was pregnant at that time, so she compares me with her. I sometime feel like I am not part of the family anymore.'*…. **Isha.**

Akos expressed feeling alone or empty because she had no child:

'Socially, I had to move away from the crowd and that was why I took a leave of absence from work after the transfer. And, I had to stay back on church activities. I did not want to have interactions with people. I feared that I may unconsciously say something about the process to the other person and all that. Socially it affected me in one way or the other. I had this feeling of emptiness and always alone.' …. **Akos.**

Lois spoke of not being comfortable in the mist of mothers who always talked about their children and stop socialising with these mothers. She expressed her feelings in this manner:

'Going out to meet people was a problem. I had to cut down socialising with people especially women who were mothers. It also affected my work because I don't joke with my work but all of a sudden, I stopped going to work after the transfer I was not going to work. I had not been at work for a

month. To go to work now wasn't easy at all. People at my work place started to talk; they were thinking that maybe I was pregnant that was why I was not coming to work; some expected that I would come to work with a protruding stomach so from me to go back to work with a flat stomach was not easy for me. It was so difficult for me going back to work. It was just this recently that I was able to report to work even it was my sister who had to force me and drag me to go to work. Had it not been her timely intervention I would have lost my job by now.' **…. Lois.**

She further explained that the feeling that no one could understand the magnitude of experience reinforced her sense of isolation:

'Also, I have become very distant from people, my interaction with people have changed from the way it was. I can't even go into the midst of people. At first, I used to associate very well with my colleagues at work. We used to get together and talk and laugh but now I don't do that with them again, even when they sit around to chat, I leave to sit somewhere quietly and think about my problems. I felt so because when I think of paying all these monies and all the commitment and stressful events and I still didn't get what I wanted it makes me so sad.' **…. Lois.**

Juliet reported feeling humiliated in the mist of her colleagues at her workplace when children are the subject of the conversation:

'Even at work place they way your colleagues will react towards you it is disheartened and humiliating. It is like everybody is talking about his/her child, but you don't have one, so you just have to leave them. It hurts a lot since I have nothing to contribute during such a chat and I have to keep quiet. But I decided not to mind them and move on with my life. Not having child is distressing. It was this kind of distressful situation that drove me to do the IVF treatment.' **…. Juliet.**

Some of the participants expressed their frustration, envy and anger with friends and the community at large as they lack understanding.

Mavis shared with me how she expressed her anger with friends at church:

'In church someone can meet you and ask eii! So, won't you give birth? So, I also say as for you people you can talk, you say only what you feel, do we sell it [baby] *at zoo that you can just go and put it in your womb? It isn't easy as that ooh! So, if you get married and you bear a child give thanks to God, it isn't easy as you see it. So, such are the things we say and laugh over yeah! You also get excited when you see a child and you say Eii! When will I also give birth, God give me some* [Laughs softly] *hmm!'* **…. Mavis**.

Francisca expressed:

'My friends and I don't have that kind of relationship, so they do not ask me questions concerning the issue of childlessness. I don't really talk to them about my situation, they try to guess and can ask question like 'you have been married for long, when will you give birth?' Those kinds of questions put me off but I always answer that it is God that gives children and I will surely get pregnant.' **…. Francisca**.

Juliet sometimes becomes angry with friends for lack of understanding**:**

'I work and live in the same community, so people see me. I have lived there for two years so they expect me to get pregnant. At times when I'm going for a leave my colleagues will tell me that before you resume, we expect you to get pregnant; they anticipate pregnancy upon resuming. Everybody will say what they want. Some go as far as asking about when I'm going to get pregnant. Sometimes I become angry and spill my guts; if I become pregnant are you going to pay the school fees. People talk a lot about it. Other times I just ignore them. I remember I was eating ice cream and they just made a comment that, "Someone who wants to get pregnant shouldn't eat ice cream". You cannot eat ice cream, and I also replied you cannot dissuade me from enjoying my favourite snack. People in my community are real gossips.' **…. Juliet.**

The following story, taken from my field notes, is an example of the way isolation and feeling like an outsider became part of the phenomenological conversation in the women's narratives as I tried to unravel the IVF treatment experience:

Journal Entry Saturday 28th January 2017

This week has been hectic, almost all the participants have spoken about feeling awkward and like an outsider in the world of motherhood. I noticed that the women were suffering in silence. Being an outcast came up in the phenomenological conversation with the participants. I discussed this with the women this week, and particularly **Isha** *spoke about the theme of discrimination and stigma. Both participants have been positive so far about their experiences.* **Isha** *tells me about how her mother-in-law mistreated her as if she is not a human being because of the issue with childlessness. She was sitting on the floor, crossed her legs, and her facial expressions showed that she was sad. I asked* **Isha** *today, about whether this was the first time she had felt like an outsider. This seemed to really touch me in a way. She responded all the time her mother-in-law made her feel like she does not belong to the family. I realised that she does not like me at all. She does not treat my rival as she treats me since she has a child. She always quarrels with me and insults me with little provocation.* **Isha** *was very discrete when she was sharing her experience as she did not want her mother-in-law to hear the conversation. She asked me to pause at the crucial point in the conversation when she sensed the mother-in-law was strolling around the house. I noticed that there was this perpetual fear, as shown by her demeanor.*

Reflective Note after the Second Phenomenological Conversation:

Journal Entry Saturday 10th March 2018

The second phenomenological conversation has been completed. I also noticed Mavis was a bit hesitant and uncomfortable during the phenomenological conversation. **Mavis** *could not share her experience in the living room because she had her house help cooking in the kitchen and does not want her to hear the conversation. She asked me to lower my voice, and I could hardly hear what she was saying since she could not speak louder, so we eventually moved to her bedroom to start a fresh conversation. She had so much to say, a range of experiences. She expressed her feelings and disappointments during the conversation.*

Francisca *on the other hand voiced out that she wanted the conversation to end as she was expecting a friend and she does not want her to hear the conversation. There were also Issues of call back as she had relocated.*

I noted that the motherless were outspoken, were chatty and grinning during the second phenomenological conversations.

Sub-theme: Reality Acceptance of *being in-the-world-of-motherless*

The lived experience theme of reality acceptance of *being-in-the-world-of-motherless* emerged from the phenomenological conversational prompts: 'How did it change you as a person?' The women accepted the reality of *being* motherless as they finally move on and decided to undergo another treatment cycle at appropriate time. The women story and their experiences required a conscious reflection to make sense of the IVF journey.

Juliet had this to say:

'I realised in this world things do not always happen the way we want it. Like if it has been well with someone it doesn't mean it will be well with the other. If someone was successful for the first time this does not imply that you too must be successful for the first attempt. There is time for everything because if it wasn't successful for you this time one day it will surely come to pass. I take consolation from these words of encouragement. There is time for everything, so life goes on.'…. **Juliet.**

Akos said:

'*Err…' I am coping. I am coping.* [Laughs softly] *It was not easy but it was worth trying. But right now, I have realised that, God does everything according to his will. God does everything in His own time, and I think in His own time things will be ok so I am waiting for God to do another miracle that is what I used to tell myself. Financially, I have to prepare for it, once I have such opportunity to do it again, I will do it again because when I got to the hospital I met some couple who has been married for twelve years and have done IVF treatment for seven times and was going to do it for the eighth time. That gave me hope to do it again.'* **…. Akos.**

Francisca's experience is a suitable example:

'I coped by the motivational words from my husband and self-motivation too. I watch a lot of movies and laugh at funny jokes from the WhatsApp. I also engaged myself with a lot of activities like watching Telenovela's and sometimes reading books. From that time also I read bible a lot and encouraged by the biblical stories about Abraham and Sarah and Hannah who suffered similar fate and pray to God. You just replaced their names with yours and ask God to help you for a miracle to happen as He did for them.' **.... Francisca.**

Lois recalled her experience:

'Through prayers, I have been praying though it is not like how I used to. I still believe in God because it is not by might or by power but by the grace of God. Also, advice from my parents and people who know what I have been through. Again, the experience that people share with me is what has encouraged me that now I am still alive.' **.... Lois.**

In *undifferentiated* mode of *existence*, *Dasein* lives its life resolutely without questioning any life events and conceals the possibility of understanding his or her *existence* in the world as asserted by Heidegger. Even though the women accepted the IVF failure, it does not mean they have abandoned or discontinue the IVF treatment but rather, they all expressed the sentiment of doing the procedure again until they will succeed.

Most participants perceived IVF treatment as a blessing, a choice of for women with fertility problems as echoed in the words of **Lois:**

'For me the IVF treatment is good; it has really made me feel that I can also become pregnant. The treatment is very good and a blessing as it has brought hope and joy to those of us who are diagnosed as infertile.' **.... Lois**.

Juliet recounts her experience:

'In Vitro Fertilisation (IVF) treatment is good because it has come to help since it has given many people the opportunity to carry their own babies. I believe there are further research works on going about improving implantation so it would help by increasing the chances of success but the cost should be reduced because many people are willing to do it but they can't bear the cost involved.' **…. Juliet**.

Mavis recounts how IVF treatment has given hope to the helpless:

'As for IVF treatment, I think it has come to help those of us growing up we were disobedient, it has brought joy in people's homes. If there hadn't been IVF program people would have lost their husbands. Its existence has given hope to people and stronger feelings of self-esteem for women like me.' **…. Mavis**.

Isha also spoke about focusing on what she had gained from the experience of living through unsuccessful IVF treatment, often pointing to a sense of being stronger and better as a person:

'As for IVF treatment it is good just that the processes are difficult, but I have had to grow in that resilience. So, I feel like I've grown so much to be a healthier individual as a result of what I have been through. It has really strengthened me to face more challenging life situations.' **…. Isha**.

In summary, the phenomenological conversations revealed the painful experiences women with fertility problems encountered during IVF treatment. The study used the three *existential* modes of *being* by Heidegger to formulate the themes and sub-themes. The women narrative revealed that the IVF treatment is not a discrete event but an unfolding process as there were some specific aspect of the IVF treatment that the motherless clearly stated as stressful in pursuit of the IVF journey.

The next chapter discusses the participant's phenomenological themes generated from the unsuccessful IVF treatment experience. I will also highlight the similarities and differences in the literature review in relation to the phenomenological themes identified in my study.

CHAPTER SIX

Discussion of the Phenomenological Themes

Introduction

This chapter attempts to unravel what the study findings mean. The phenomenological themes emerged from the narratives of the participants' lived experiences of unsuccessful IVF treatment are discussed in relation to the existing reviewed nursing literature and the objectives of the study.

This study focused on the lived experiences of Ghanaian women journey with IVF treatment procedure and their perception with unsuccessful IVF treatment in the pursuit of motherhood. Based on the results, four lived experience themes were uncovered for discussion: **Seeking wholistic and *authentic* care, Facing up to the *Angst,* The vulnerable self** and **living with infertility.**

The themes are discussed in relation with the philosophy of Heidegger's three modes of *being*: seeking wholistic and *authentic* care; *Sorge, Dasein (authenticity; mine-self)*, Facing up to the *Angst, fallenness, They-self [Das Man]/* and *thrownness (inauthenticity)* and (*being-in-the-world-of-motherless (undifferentiatedness)*.

The result of this study offers new insight into the perspective of Ghanaian women experiences of unsuccessful IVF treatment. The study findings provide understandings into the challenges and sufferings that Ghanaian women go through during IVF treatment. It appears there is a need to implement programmes to support this group of women with infertility and seeking IVF treatment.

Mode of *being-authenticity*

Heidegger's 3 Modes of *being*	Lived Experiences' Phenomenological Themes
Authenticity **(*mine-self*)**	**Seeking wholistic and *authentic* care (*Sorge, Dasein*)** - *being* concerned with the *authentic self* - *being* cared for and supported - encounters with the IVF service *entities*

Taken from Table 6 on page 106

Lived Experience Theme-Seeking wholistic and *authentic* care (*Sorge, Dasein*)

The concept of care is fundamental for Heidegger as care unites the basic facets of how *Dasein* relate to human being-in-the-world (Dreyfus, 1992). For Heidegger another form of care is *authentic care* which enables others to become true and discernible to him or herself without any external obstacles. Further, the care structure as described by Heidegger can be ontologically understood as care for oneself (*Selbstsorgen*), care for other people (*entities*) *in-the-world (Fürsorge)*, and care for substances, projects or things (*Besorgen*) within it (Inwood, 2000a). In ***Being* and *Time*,** Heidegger (1996) described *Dasein existential* nature, as being concern. That is understanding that human beings have over themselves and showing concern for others by interacting with other people in their world (Inwood, 2000a). As Heidegger, explain *Dasein* constant relations as *being-in-the-world*, is care (*Sorge*) which is essential to the care structure. Heidegger claimed the nature of *Dasein* itself is exposed as 'care' (*Sorge*) as people engage in constant relationship and interact with each other in the world and showing concern and appreciate each other.

Notwithstanding, Heidegger also identifies *solicitude* care where, *Dasein is* concern with other people's problem in the world (establishing caring relationship within our own world and fellow human beings). Heidegger also explains two modes of solicitude care. That is; l*eaping-in* (*Dasein* is concern with and sorely taking over for the other people in the world), and *leaping ahead* (the provision of *authentic* and wholistic care enables the possibility for the other individual to become *resolute* and takes responsibility of situations and *authentic self* (Freeman, 2009; Heidegger, 1996). To be *authentic* is where individual recognises his or her problems and making the choice within the array of responsibility to find solution to the existing situation in accordance with one's limited future possibilities.

The results revealed that the participants were concerned about their care needs as a part of the *existence* in the IVF treatment journey in order to belong to the mother world. The women in the study spoke in considerable detail about their experiences in entering IVF treatment journey. For the women who participated in this study, undergoing IVF treatment means realising the problems showing concern for the *authentic self*. They were of the view that the *meaning* of their *existence* (*Dasein*) in the world as woman is to produce an offspring, *(authenticity)*. Given the value attached to motherhood in traditional Ghanaian society, the women showing concern for *authentic self*, sought fertility care in order to give birth to their own biological child who can also continue with the family lineage. The reasons women gave for setting off on this journey was to fulfil their desire for biological parenthood so that their families may be complete. The women believed that the only means to eliminate the social stigma associated with childbirth would be IVF treatment. The findings also revealed that some women also believe giving birth will change their social status and boost their life expectations and societal perception towards childlessness.

The findings demonstrated that the participants' care for themselves that is why they undertook medical treatment to make sense of their life. Even though, the women could have opted another means such as adoption to have their babies which could have save them the stress and pains. The study findings revealed that all the women wish to have their own babies by a natural means than adoption which was regarded by them as an unnatural means. During the treatment, the participants re-prioritised working and family relationships as well as other important life goals and focused on the treatment. The findings support the study by Ying et al. (2015) where the couples insisted on having their own biological child who can carry on the family bloodline, given the importance of child-bearing in the Chinese culture. Similar result has been found by Durgun-Ozan and Okumuş (2013) in Turkey where women in their study stated that they undertook the IVF treatment with the aim of having their own biological child who will continue the family lineage.

Ying et al. (2015), study also revealed that the couples in their study refused to settle for adopting a child or settling for a child free life. This was also expressed in my study where the women gave varying reasons stating that they did not want to adopt a child because they wanted to carry their own baby and breastfeed them to prove their own fertility.

Wholistic health care reflect total patient care which treat the whole persons as well as the interrelated parts of an individual (McEvoy & Duffy, 2008). Wholistic health care considers all diagnostic and therapeutic modalities of an individual, family as well as the community in general. The wholistic approach also concerns a person's biological, psychological, sociological, and mental and spiritual needs of a person's response to an illness (McCormack, 2003). Providing wholistic care encourages the healthcare practitioner to understand the effect that illness has on patients whole being so as to integrate self in order to facilitate optimal healing (Mead & Bower, 2000). It is believed care that focuses on only the diagnosis of the physiological disorder and not considering the total wellbeing of the mind, soul and body or social impact hinders total healing and the ability to meet patient self-care needs (Suhonen, Välimäki, & Katajisto, 2000). A wholistic approach to infertility management may facilitate self-care needs and wellness of women seeking IVF treatment.

Watson's theory of human caring stresses on wholistic care and the authentic relationship between caregivers and patients. The ***"Theory of Human Caring"*** was developed as a result of Watson's desire in re-establish wholistic practise in nursing care (Watson, 2008).

Watson (2008) developed ten carative factors in 1979 that advance to the *caritas*[17] process to guide nursing practice. This caritas process is the first component of Watson's theory. The carative factors offered a wholistic perception to patient care rather than sorely depending on the biophysical model. The carative factors also encourage nurses to treat patients with care, respect, and dignity so that patients feel accepted, supported, and protected. Watson was of the view that without integrating the carative factors, a nurse was just rendering performing tasks-oriented nursing duties and not providing optimal care (Watson, 2008). The theory encourages the nurse and patient to engage in *authentic* relationships in caring-healing practice, thereby enhancing the healing

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[17] *Caritas* is a Greek word which means to give a peculiar attention to what you love in your life (Watson, 2008).

environment. Caritas process involves wholistic and authentic care to promote better patients outcomes (Lukose, 2011).

The theory has been adapted by several researchers in several countries, including Durgun-Ozan and Okumuş (2017); Durgun-Ozan, Okumuş, and Lash (2015); Boz and Okumus (2017) as a strategy to provide total nursing care for women with infertility problems.

Durgun-Ozan et al. (2015), revealed that providing patient care drawing on Watson's "***Theory of Human Caring"*** may be helpful in reducing the negative impact associated with infertility treatment. The author's described how integration of the ideas and values of Watson's theory into the care of IVF treatment has yielded significant improvement thereby enhancing personal growth. They indicated that, the outcome of this case study suggest that utilising the caring theory could be suitable in providing wholistic and authentic nursing and care. Applying Watson's Theory (carative factor #6), creative problem-solving method for decision making and the corresponding carative process, to this case study was considered necessary as it helped the patient to attain optimal healing. Women and couples who are infertile begin the IVF treatment hoping to enter parenthood but the procedure has its own challenges as such there is a need implement supportive programmes to meet the care needs of this vulnerable population [corresponding carative process # 4].

Although my study did not apply the Watson's "***Theory of Human Caring"***, Ozan, Okumus and Lash's study provides a valuable information about the implications of applying a theory based model in nursing practice. It was noticeable from their study that the women needed the nurses to be there for them throughout the whole process and even after the treatment failed [corresponding carative process # 4]. Many of the women in my study also appreciated the presence and support from the health professionals as it has been established to be effective in decreasing the negative effect associated with IVF treatment. As Heidegger states that *authentic* care is to be fully committed to the task and show concern to the other person irrespective of the problems at hand. The findings of the current study also point to the need of the women appreciating wholistic and *authentic* nursing care delivery as it is considered the foundation of nursing practice.

Ozan, Okumus and Lash further revealed that the nurses' role of assisting the women during their IVF treatment was effective in restoring hope and renewing the women's perception of a possible future.

More recently, a similar randomised study by Durgun-Ozan and Okumuş (2017), found that applying Watson's Theory to nursing practice may decreased the negative impact and increase coping measures of infertility in women receiving infertility treatment. Ozan and Okumus, recommended, Watson's "***Theory of Human Caring"*** to be used by nurses to guide them deliver effective and safe care for patients receiving infertility treatment to help reduce the many challenges associated with IVF treatment. Watson asserts that, people suffering from intensely lived difficulties are seeking for a more *authentic* ways to provide caring practices for themselves as these people need support to view concerns in relation to their existing world (Watson & Browning, 2012).

As revealed by Boz and Okumus (2017), the participants were concerned about their care needs as a part of *existential* world. In view of this, nurses should care for patients by showing attitudes and actions that demonstrate an interest in their welfare. The women stories highlighted that they were desperate as they were uncertain about the treatment outcome and fear that they may experience a negative outcome. Again they were disappointed and devastated when the procedure proved negative. The authors claim that as women often expresses their feelings of despair silently, nurses in this position can provide care using empathy, understanding, respect, relevant guidance, emotional support, and spiritual care and to use their abilities and skills when performing technical procedures. Boz and Okumus recommended that healthcare practitioners especially, nurses should help women who are infertile and couples to recognise the consequence of infertility to adjust cope with the treatment and its associated challenges.

For the participant to give birth and enter motherhood may be a dream come true for women undergoing IVF treatment (Johansson & Berg, 2005; Su & Chen, 2006). When this desire is not fulfilled, she feels less than whole as a woman since she is not able to fall pregnant which is considered the most basic functions as expected by society. In general, the women were optimistic that the IVF treatment could help them have their children and subsequently, enter motherhood.

The women opted for the IVF treatment, with the expectation that the fertility healthcare professionals especially the physicians and the nurses would help them resolve the infertility problem to fulfil their hope of achieving their dreams of having a child. At the beginning of treatment, the health professionals at the clinic reassured them that IVF treatment could help them raise their babies. The doctors also maintained a hopeful stance, that the IVF procedure would help them carry their baby. This also led to the disappointment felt by the women when the treatment was not successful, and these reassurances made them inadequately prepared to cope with the loss and grief which come about with an adverse pregnancy outcome.

Peters (2003) used a hermeneutic phenomenological approach to explore the meaning women assinged to the lived experience of unsuccessful IVF treatment programmes. In Peters study, the participants complained that the staff at the clinic were overly optimistic regarding the likelihood that IVF treatment help them fall pregnant and subsequently raise their own children. This led to the participants felt 'being let down' Peters (2003, pp. 263-264) as the hope of achieving full term pregnancy proved futile. The author suggested that it was irrelevant for them to be over confidence as this contributed the women being ill-prepared to accept the loss.

These findings are similar to what was found by my study where the women expressed that the healthcare professionals at the clinic were overly optimistic that the IVF treatment will work. Notwithstanding the fact that hope is an important deciding factor to continue IVF treatment, it is also crucial for the nurses to tell them the realities of all possible outcomes of the treatment to enable them prepare psychologically for any negative outcome. To be able to deliver wholistic care, there is the need to ascertain and deal with unlikely assurances of success rates in IVF programmes. It is vital for the fertility health prefessionals to temper hope and optimism with realism. This reassurance may deter them from making the effort in seeking further treatment in the unlikely events of the treatment failure.

The idea of caring and support for infertility care is well documented in the nursing literature in determining the success rates of the IVF treatment struggles, especially before, during and after the treatment journey (Agostini et al., 2011; Martins, Peterson, Almeida, & Costa, 2011; Verhaak, Smeenk, Evers, et al., 2005). Researchers have indicated that women undergoing IVF treatment often need total patient care and support that facilitate personal confidence in the quest for optimal wellness and healing in the IVF treatment journey (Agostini et al., 2011; Boivin et al., 2011; Pedro & Faroa, 2017; Peters, 2003). It is reported that support from health professionals is particularly effective at decreasing the stressful and invasive nature of the IVF procedure. The motherless in their search for support, looked to healthcare providers and significant others to provide care and support tailored to their needs.

Peters's (2003) study provides the motivation behind why women were concern and needed total nursing care, support and healthy relationship from their IVF carers as they believe it will benefit them. In Peter's study, the theme 'getting it wrong' was the most obvious category shared by all the six women during the phenomenological conversation. The women were concern that the health professionals at the clinic were getting it wrong regarding information and communication. The women reported experiencing dissatisfaction from the healthcare workers' poor interpersonal and communication skills about unwanted effects of treatment, insensitivity, lack of individualised care, receiving little emotional support and lack of empowerment. The author suggested that the poor communication portrayed by the healthcare personnel's may be directly related to a lack of understanding as a result of inadequate education on IVF care.

Unfortunately, the women complained that support received from the fertility clinic staff were not enough which also affected their level of satisfaction with care in my study. Although some of the women described positive relationships, (*authentic* care), most reported considerable dissatisfaction with the healthcare professionals and mistrust (*inauthentic* care). This current study revealed that the women expected total fertility care that considers both psychological and emotional wellness from the nurses and physicians during their care. The support they expected included discussing emotional issues, provision of adequate information and explaining the side effect of treatment. They complained that the healthcare professionals especially doctors and nurses were emotionally detached as they expected them to be there for them particularly when the IVF treatment failed. Most importantly the women stated that they expected the nurses to be empathetic, supportive, more cheery and considerate but this was not the case by some of the nurses.

Each time there is an implantation failure the participants thought there must be reasons why the cycle failed, which they expected the healthcare professionals to identify and remedied in order to prevent subsequent IVF failure. The women complained that they were not able to get a tangible answer about why the treatment failed.

However, my study findings suggest that the women idea of total care centred on the desires that the IVF carers show concern and *being there*, and being closer to them during the IVF treatment.
As Ying, Wu and Loke, (2015), study revealed, support from the healthcare professional was described by the participant as woefully inadequate mainly due to the hectic nature of the clinic schedules which also resulted in short consultation period. This makes it extremely daunting task for the clinic to fulfil the emotional as well as informational needs of the patients. Counselling support are normally not available, and couples seeking fertility care must find their own way to manage with the stress and difficulties associated with the treatment. The authors suggested that there is a need for the provision of emotional and psychosocial intervention for couples undergoing IVF treatment.

More recently, Pedro and Faroa (2017) also reported a similar finding of SA women experiences with involuntary childlessness in their study where the, participants expressed a need for emotional and psychological support. The women also felt that due to inadequate technical skills and knowledge about the fertility care, this left them being deprived of crucial information. In their concluding remarks the author's suggested that, provision of patient centred and individualised form of fertility care may go a long way to improve the care aspect of the procedure.

The importance and benefits of integrating psychosocial support care into routine medical fertility practice has also been documented and recognised by Dancet et al. (2010); McCarthy (2008); Peters (2003) and van Empel et al. (2010).

Studies indicate that effective quality care for women or couples living with infertility should be patient-centred besides effective medical interventions (Dancet et al., 2010; McCarthy, 2008; Peters, 2003; van Empel et al., 2010). Although women and couples who are infertile experience many difficulties in their IVF experience van Empel et al. (2009), recent reports confirm that the delivery of patient-centred infertility care tailored to individual needs could bring patients many benefits, especially when it comes to their perceived well-being. In particular, delivery of care in a patient-centred way could remove some of the emotional and psychological distress *(Angst)* and burden of infertility treatment as well as facilitating special needs for support (Aarts et al., 2011; Boivin et al., 2011; van Empel et al., 2010; Verhaak et al., 2006). This possible benefit has often been discussed (Dancet et al., 2011; Durgun-Ozan & Okumuş, 2013; van Empel et al., 2010).

Van Empel and colleagues study confirm that although, couples living with infertility experience many weaknesses and needs in their fertility care, they were also of the view that they needed individualised and focused care in order to meet their self-care needs van Empel et al. (2009). The women in their study indicated that they experienced many flaws in fertility care, mostly concerning the aspects of continuity of care and emotional support. Also, the result revealed that the couples strongly wanted to have free access to their own diagnostic assessment and medical record without encountering any impediment. Then again the women and their partner expressed a need for continuity form of care from the physicians and the nurses during their care and after the treatment has even ended.

Dancet et al. (2011) study also offers a detailed description of the notion of patient-centredness form of infertility care and the provision of model to support the concept. The study describes the ten dimensions of the concept ‘patient centred infertility care’ in detail and provides an insight into the concepts’ complexity with the aid of an interaction model. Among the results the authors suggested that fertility clinics may consider using the dimensions of patient-centredness infertility care and the model identified in their daily fertility care and management. The authors also recommended that to improve patient care (*authenticity*) and decrease distress (*Angst*) associated with fertility care, the health professional must pay particular attention to both human and system factors in the daily encounter with patients involved in the IVF journey.

The findings of my study revealed that all the participants expressed frustration and disappointment about lack of individualised care from the IVF carers that attended to their care needs whilst pursuing the IVF treatment in particular at the time when the pregnancy results were announced. All the women stated that they needed privacy and individualised approach to care from their IVF carers. The present findings are consistent with the study by Dancet et al. (2011); van Empel et al. (2010)**.** It was clear from my study findings that the women seeking fertility care attached much importance to several form of patient centeredness. The women complained bitterly about the insensitive nature regarding the way in which the counsellor disclosed the outcome of the pregnancy test. The participants felt worthless, humiliated, lack of privacy and confidentiality and not involving them in their care. They were all alarmed and expressed dissatisfaction with the inhumane nature the information was shared to them as they needed privacy and confidentiality. The women also expected the doctor to be there and talk to them during that day when the result of the pregnancy test result being disclosed but did not show up to address their concerns. The result also highlight that the nurses focused on routines and tasks but not practicing wholistic nursing care.

It was rather unfortunate that, participant's described encounters with service *entities* that reflected unfamiliar mode of engagement when they entered the world of ART treatment. Within these unfamiliar engagement participants disclosed health care services that deny their privileges as service users in the IVF care setting (denied *authenticity*). Some of the women were not happy and objected to the fact that the nurses in charge discharged them from the hospital two to three hours of bed rest because they were concerned about dislodging the embryos. Some of the women even attributed the failure of the treatment as a result of their short stay at the clinic after the transfer of the embryos and even blame the nurses for causing the implantation failure.

The high treatment cost of fertility treatment presented as an added burden for the motherless in this study. The high cost of IVF treatment makes it difficult for the average Ghanaian citizen to afford and access the services. All of the them stated that they had financial difficulties accessing the treatment as they had to go for bank loans to enable them to receive the treatment since there is lack of state support and health insurance covering these expenses. The average treatment cost of one cycle of IVF during the period of the study was ranged between 3000 to 4500 U$D. The study revealed that as IVF care are availabe only in the private hospitals and clinics in Ghana, the costs incurred are exorbitant and can only afforded few Ghanaian women. The women complained that the costly nature of IVF treatment has brought a huge financial strain and were hurt, after spending such a huge sum of money but the procedure was not unsuccessful.

It is therefore suggested that, to provide increased access to IVF treatment care setting it is significant to make the services affordable or should cover with the health insurance where needed, so that the average Ghanaian citizen can readily access the ART services. This will also allow the less fortunate individuals who are infertile from accessing the IVF treatment.

The participants appreciate counselling, in the form of providing appropriate educational and informational needs is believed to be an essential aspect ART setting. The participants criticised the counsellor’s communication style and they complained that the treatment result was poorly explained. The women stated that although counselling services was available most of them complained that the counselling support was not insufficient, in particular with the aspect of providing mental and emotional wellbeing. From the women’s narratives, it was evident that the motherless were not happy at all with the information shared. Several of the women also suggested that ongoing professional counselling should be incorporated and sustained in the IVF treatment. The health professional and the staff at the clinic setting should make frequent contact during treatments mainly during the two weeks wait for pregnancy test result and after a negative pregnant result have been disclosed. They were of the view that information sharing of IVF treatment should therefore include both the positive and the negative information. This will help the women to see new possibilities for the future.

The women demanded that separate counselling sessions should be provided when disclosing the outcome of the result. The importance and benefits of integrating psychosocial support care into routine medical practice has been recognised and established by many researchers (Boivin & Lancastle, 2010; Gerrits & Shaw, 2010). The findings of my study also support the views expressed by Aarts et al. (2011); Hammarberg (2003); Hammarberg et al. (2001); Pedro and Faroa (2017); Peters (2003); Ying et al. (2015) that counselling is very essential particularly during the most stressful time, that is, during the two weeks waiting time to find out if the procedure has been successful or not. Among the result the researchers also emphasis that for the women to feel being supported, healthcare professionals must pay peculiar attention to needs and spend quality time with them so that they may feel they are being cared for.

Juliet said it was unethical for the counsellor to have disclosed the news in such an unprofessional manner**. Akos** and **Lois** were of the view that counselling should be done independently. **Mavis** and **Francisca** also shared similar view and complained that disclosing the news was a private matter and as such should remain confidential. Likewise, **Isha** preferred separate individual counselling session.

Another noteworthy finding in this study involved the value of emotional support from other women with infertility problems who were conceived through IVF treatment expressed by the women. Many of them stated that they received support from women with similar issues with infertility who conceived through IVF treatment. Comment from the women indicates how they benefited from emotional support received from women conceived through IVF treatment.

The findings of this study suggest that those who have lived in a similar experience understand and trust each other. The motherless also stated that they feel comfortable just to listen to each other's stories and help support a sister who is down there to come up. In sharing their lived experience with women who have had similar problems they feel relieved as they understand the multiple challenges and nature of the experience of being in the same situation.

One other remarkable outcome in my study under the **theme-Seeking wholistic and *authentic* care** is whether the women were being supported and cared for by their partners, friends and family members in their IVF treatment journey. Most women specified that *being-in-the-world* of treatment process strengthen their relationship with their partners, whereas others stated otherwise as they expressed a negative situation. In contrast, majority narrated stories of experiencing joyful and pleasant and renewal of friendship from their partners that facilitated their well-being. The women recounted how they felt supported *authentically*, emotionally and financially particularly by their husbands. Professing care and concern for their wives, the women in this study expressed that their husband took over care by being supportive throughout the whole IVF treatment. The women reported that their relationship with their partner improved and remain stable both at the beginning and after their treatment. Their experiences were founded on their husbands' *'being-with'* them throughout the IVF treatment journey, as their husbands exhibited genuine character and interest in caring, thereby reducing anxiety (*Angst*).

This result is contrary to the nursing literature which confirms that most partners are negatively affected during IVF treatment. Several women in earlier study described how their relationships with their husbands or partners generated bitter experiences due to the issue of childlessness and subsequent IVF treatment failure (Hammarberg et al., 2001; Verhaak et al., 2001; Ying et al., 2015). The authors reported that there was absence of support observed among some of the women and couples in infertility treatment. On the contrary, **Juliet, Mavis and Akos** expressed that their relationship improved and they enjoyed their marriage at the beginning and even after the treatment.

Similarly, my findings also harmonised with Durgun-Ozan et al. (2015), who also reported that generally women and couples with fertility problems who experienced unsuccessful IVF treatment had improved partner relationship throughout the treatment process.

Although some of the women reported that they enjoyed their marital relationship during the periods they were pursuing treatment, many of the women complained that their sexual relations was adversely affected. The women recounted how sexual relations had become a scheduled activity thereby increasing relational tension in their marital relationship.

Unsuccessful IVF treatment can have devastating effect on women's life. It believed that engaging in healthy interactions and supportive behaviours with the women could result in better and positive patient health outcomes and increased the self-assurance of these women during the challenging moments. The physical, socio-economic as well as the emotional support provided by the husbands of the motherless before, during and after the treatment was well appreciated by most of the women contributing to their well-being during the IVF treatment journey.

Mode of *being-Inauthenticity*

Heidegger's 3 Modes of *being*	Lived Experiences' Phenomenological Themes
Inauthenticity **(*they-self*)**	**Facing up to the *Angst* (*Angst,* [*Verfallen*] *fallenness*)** • *Angst* of uncertainty • experiencing existential faith and hope • guilt and self-blame • non-disclosedness **The vulnerable self (The *they* self [*das Man*]), *thrownness,* [*Verfallen*] *fallenness*)** • painful experiences • loss of *being-it-self-in-the-world* • sense of grief and profound loss

Taken from Table 6 on page, 106

Major Lived Experience Theme: **Facing up to the *Angst*** (*Angst, Fallenness)*

The second concept of Heidegger's mode of existence is being *Inauthentic*. In this kind of *existence*, *Dasein* struggles with the existing situation, which Heidegger refers as *fallenness* (*Verfallen*), which may also result in *Dasein* being engaged in its world and not taken a particular attention of its *existence* (*Existenze*). Heidegger termed the moment of disruption anxiety (*Angst*) expressed as the that mood in which *Dasein*'s everyday way of *existence* in the world is characterised by anxiety and fear (Mulhall, 2013). The participants reflected on the challenges encountered and were able to face up to the problems and able to identify ways in which they faced these challenging situations. Consequently, the theme **'**Facing up to the *Angst* reflects the ways in which anxiety clouded their minds.

Anxiety (*Angst*) is also expressed as a common response for women with infertility problems who have experienced a failed IVF treatment (Durgun-Ozan & Okumuş, 2013; Hammarberg, 2003; Harris & Daniluk, 2009; Johansson & Berg, 2005; McCarthy, 2008; Peters, 2003; Volgsten et al., 2010a; Ying et al., 2015).

The overarching theme '**Facing up to the *Angst***' became apparent in the women's conversation as they shared their stories of failed IVF treatment. They explained how they struggle through diverse stages of the treatment to fall pregnant. The women stated that the IVF journey has not been particularly an easy experience. Many recounted enduring difficult situations to ensure that the treatment will be successful.

One of the most traumatic aspects of ART is the waiting period for pregnancy results after embryo transfer. This period of waiting as stated by the women causes great pain (*Angst*) and described the experience as the most fearful and challenging moments for their *being-in-the-world* of ART (Durgun-Ozan & Okumuş, 2013; Hammarberg, 2003; Lampley, 2010; McCarthy, 2008; Peters, 2003; Ying et al., 2015). All the women in my study reported that the greatest fear experienced in the IVF journey was the interim period post embryo transfer to determine the outcome of the procedure.

Lampley's study (2010) set out to determine women's experiences during the ten to fourteen-day after the doctor has transfer the embryos in the womb and waiting to delineate the aftermath of pregnancy, so to make sense of their non-embedded embryo(s). The participants' description revealed one overarching essential theme-'Waiting' during the 10 to 14-day period of learning the results of the pregnancy test. Waiting was found to be apparent in each of the participants' stories which is characterised by range of emotions and actions as the women moved closer to the day waiting to hear their pregnancy test result. The participants in Lampley's study shared experiences of 'Waiting in Anxiety' where descriptions of stress, worry, and fear clouded their minds. The women were very anxious and uncertain while waiting for unknown pregnancy outcome. These women also described their levels of attachment to their non-implanted embryos following the embryo transfer.

The participants in my study were very troubled by feeling they lacked control, mainly as they had placed great confidence in the ability of IVF treatment to help them. They criticised and blamed the staff involved in their care for not helping them obtain the needed support and professional counselling in this critical moment by their doctors, nurses' as well as the counsellor. In the treatment process, the women cannot be prepared for the positive and negative effect of the treatment. Therefore, after the disclosure of a negative pregnancy result the women experience emotional and psychological trauma including immediate heartbreak, shock and disappointment, thinking that all their efforts and financial resources has gone down the drain. They described becoming emotional ride of ups and down for which they lacked control over the situation.

The fourth sub-theme in Lampley's study, 'waiting in doubt' was found to be a common feeling during the ten days waiting period as they questioned whether their IVF treatment would be successful. They were uncertain about the treatment outcome whether it will be successful or not and at times expressed self-doubt as they begin to doubt their own degree of commitment to the IVF procedure.

The women in my study continued to experience doubt about the treatment outcome. The uncertain outcome of this stressful and painful process of IVF treatment left the women feeling anxious and devastating. Some of the women who have undergone repeated IVF treatment failure seem to have reported suffering a roller coaster.

Lampley also mentioned that the women experienced a sense of hopelessness. The participants at some period would become desperate when they began to think about the impending pregnancy test result and would perform a home pregnancy test even when they were advised against this.

All the women in my study reported difficult situations and unpleasant experiences and emotions during the two weeks post embryo transfer. The two weeks waiting period was described by the women as most distressing, worrisome, roller coaster ride of emotions, dishearten, heighten anxiety, devastating due to the possibility of the failure of the treatment. Nonetheless, it was reflected from the women' conversations that they suffered emotional high and lows during the wait for pregnancy test result.

Akos really associated the period before the results of the pregnancy test were released to waiting for a death sentence. **Lois** actually described the two weeks waiting period as like writing an exam and wondering if you will pass or fail. **Juliet** and **Mavis** described it as an emotional roller coaster. **Francisca** described it as potentially life-threatening condition.

Continuing with Lampley's (2010) study a sub-theme of waiting in 'Anticipation' emerged. Finally, the women waited in Anticipation for the uncertain outcome of the pregnancy test result and started to imagine the setting in which they will hear their result. The motherless in my study found themselves anticipating their next step in pursuit of motherhood as they prepare for the possible outcome. The author further stated that as the women do not have any influence concerning the outcome of the pregnancy test they could possibly wait in anticipation to hear the result.

Hammarberg Astbury and Baker's follow-up study revealed that the women described the ten to fourteen days post embryo transfer to receive if the outcome of the procedure had been successful were recalled being particularly most worrying event in the IVF treatment. The result of my study also affirms Hammarberg, Astbury and Baker's (2001), assertion that the impact of IVF treatment is felt during the wait for pregnancy result, which suggest that women undergoing IVF treatment suffer from inertly whilst awaiting outcome of result being out of their control.

These unfriendly experience expressed by the women during the phenomenological conversations could be used by the IVF health carers to offer valuable patient specific and wholistic care for these group of vulnerable population to promote their total well-being.

These informational and emotional concerns expressed by the motherless could be helpful in building a more balanced and integrated care specifically tailored to match their self-care needs. It was therefore established from the study that despite this hardship the women made every effort to face up to the problem in order to fulfil their wish for a child.

The findings of my study further revealed that the women experienced *existential* faith and had high hope at the beginning of the treatment trusting they would fall pregnant and give birth to a healthy child and belong to the mother world.

Faith is described as an enduring and central tenet in the lives of the women during the IVF procedure. Faith helped the women endure the frustrations and difficulties experienced during the IVF treatment by making *meaning* out of their distress. The women spoke of their faith or religious practices as helping them survive and cope with their loss. The participants stated that, the whole experience of infertility treatment has been very challenging and a complicated one which impacting on every aspects of their *life-world*. Notwithstanding, the motherless stated that with God on their side they strongly believe their names would be changed from motherless to motherhood with God's intervention. They all expressed a sentiment of praying a lot and having faith in the Supreme Being [God or Allah] which helped them make *meaning* out of their suffering as they belief that by divine intervention, they were going to achieve pregnancy. The women also spoke with a great conviction that, they were solely trusting God for a miracle to happen. They believed that in God's own time He will make all things beautiful and put smiles on their faces which gave them assurance to intensify their prayer life and become more spiritual. The women's' faith in God was a strong source of hope and motivation during the IVF treatment.

Quite remarkably, the findings above are also validate with the findings of a research inquiry conducted by Mosalanejad et al. (2014). It was known from their findings of the study that majority of the women coped with their fertility problems through coming closer to God. Saying a prayer to God, family interceding on their behalf and visiting shrines gave them self-satisfaction and kept the hope alive and provided motivation to follow the ART procedure.

A study by Chan et al. (2012) reported in their findings that, integrating spiritual care in psychosocial group intervention for women undergoing ART services promoted the psychological and spiritual well-being of the women diagnosed as infertile. Their result revealed that at the end of the group therapy, women described decreased levels of anxiety (*Angst*) and physical distress significantly. The authors stated that the women reported that there were less confusion, enjoyed their greater marriage and increased tranquillity, after the spiritual therapy. The researchers suggested that there is the need to incorporate religious and spiritual issues into current spiritual and body and mind therapies with the aim to improve spiritual care as well as the psychosocial needs of women pursuing IVF treatment. This may help them to cope better with their distressing and challenging situations.

Boz and Okumus (2017) also identified existential faith and hope in their study where many participants took solace in religious belief as they were intensely focused on becoming mothers. The women believed they will conceive a child through ARTS services was considered as an attempt of taking responsibilities of their situation and make sense of existence for motherhood, although they were uncertain about the future choices. They have had existential, religious, and spiritual experiences hoping that they will belong to the mother world to make their life complete.

Hope is a wish for a desired expectation (Mosalanejad et al., 2014). Hope is one of the most important factors in IVF achievement and women begin treatment with the high hopes. The participants were hopeful, and they were quite optimistic about the potential for a successful conception when they began the IVF treatment, with the hope that they would enter motherhood. Thus the participants were optimistic gone through series of being hopeful when they began the IVF treatment and reported a great sense of possibility of achieving positive pregnant, and deep sadness, when the treatment turned out to be unsuccessful. For all the women the struggle to remain hopeful was difficult but in spite of their disappointment, they kept the hope alive. Past researchers have also shown there is greater amount of anxiety and distress amongst women still hoping for pregnancy (Durgun-Ozan & Okumuş, 2013; Lampley, 2010; McCarthy, 2008; Peters, 2003; Ying et al., 2015).

The first sub-theme, in Lampley's study, waiting in hope highlighted that women experienced hope as they became excited and optimistic about the possibility of having a positive pregnancy test to fulfil the desire. Similarly, previous research by Peters (2003, p. 263) revealed that, the women who are infertile expressed that they were 'being let down' wherein they were disappointed about the failure of the IVF treatment as they greatly believed the treatment will help them become pregnant. A study done in Turkey by Durgun-Ozan and Okumuş (2013), of experiences of women about infertility treatment, the participants believed that assisted reproduction techniques (ARTs) could reverse the effect of childlessness which was not the case. All the women complained that they were alarmed and felt awful when the treatment failed as they had high hope that the treatment will work for them. Furthermore, Durgun-Ozan and Okumuş (2013, p. 60) also identified 'hope-hopelessness cycle' of participants for future fertility treatment on IVF programmes.

The findings of my study revealed that generation of hope occurred in **five main ways**: (i) regaining hope in light of hopelessness; (ii) a sense of comportment and feeling vulnerable; (iii) enduring hardship because of hope for a dreamed child; (iv) expression of *existential*, spiritual and religious faith and relationship with God and yet (v) a feeling of choice and hope for a better future. This approach was essential in strengthening the women's' integrity and helped them stay true to a challenging and yet intrusive and tedious procedure.

Common to all, the women expressed guilt and self-blame about not being able to do what is expected of them as a woman. Enmeshed with guilt about the unsuccessful treatment were feelings of guilt about the cause of infertility and blaming themselves for the inability to become pregnant. A similar view was also shared by Durgun-Ozan and Okumuş (2013); Mosalanejad et al. (2014) where the authors claimed that the women had negative perspectives, considering all their desires and aspirations were lost and were dispirited.

The women in my study felt that the opportunity of motherhood had eluded them as being a mother. Motherhood is seen as an important societal role for women in the Ghanaian culture as such all the women grieved the loss of the motherhood role. They expressed their feelings about not being able to be like every other woman who did not find it difficult to achieve pregnancy whenever they wanted. Inhorn and Buss (1994), proposed that in a pronatalist countries such as Ghana who advocate for bearing children and subsequent motherhood, it essential to reproduce to ensure the continuity of family blood line or humanity.

Non-disclosedness

Issues of childbearing ability is deemed crucial aspect of motherhood and therefore unfruitfulness may be considered atypical. Likewise, IVF treatment may be viewed as going against nature as many people do not understand the procedure and think it is not natural way of becoming pregnant. Undergoing IVF treatment can be a very sensitive elusive subject for discussion. Interestingly all the women decided not to disclose their IVF treatment journey to their friends as well as their families and preferred to keep this fact to themselves except to some close relations. The women were very choosy with the persons they disclose their IVF related issues with. They particularly favoured reliable people with similar circumstantial experiences.

The women gave varying reasons as to why they concealed the treatment to themselves. The motherless intentionally concealed the treatment from the public domain to prevent their children from being stigmatised as the society believed that children produced through IVF will be abnormal. Others decided to conceal the IVF treatment to avoid being the target of gossip whilst others wanted to avoid any misunderstanding as society does not believe in test tube babies. Several of the women also stated that they only disclosed IVF treatment journey to those in similar situations just to encourage and support themselves. Infertility may threaten self-esteem and identity of the women who are infertile attributed to the feature of associated stigmatisation. Consequently, it is explicable that the participants decided to keep their treatment from the public the general public domain.

Returning to Peter's study (2003), the author reported that the participants had many negative experiences associated with the disclosure of their infertility treatment. The participants decided to remain secrecy about their fertility treatment due to cultural and religious implications of being infertile and seeking assisted reproductive treatment, the stigma attached, and fear of being the target of gossip.

Similar result have also been reported by (Durgun-Ozan & Okumuş, 2013; Hammarberg, 2003; Hammarberg et al., 2001; Johansson & Berg, 2005; Ying et al., 2015). The authors stated that some participants deliberately kept their diagnosis and treatment a top secret due to religion-cultural ramifications associated with infertility and attendant negative attitude towards ART services. Some motherless had kept it a secret due to its sensitive nature.

Major Lived Experience Theme: The vulnerable self (The *they* self (*das Mann), thrownness, and fallenness*).

For Heidegger, each human life comes upon itself amid the situations into which it has been *''thrown,''* without regard to that person's wishes. It may be seen as an obligation for an individual to search for *meaning* to make sense of the *world* in which they have been *thrown* into. *Meaning (Sinn)* as explained by Heidegger is an understanding that stems from a projection and enables us to understand a particular *entity* wherein something maintains itself intelligibility. The only way for a woman to cope with *thrownness* is to make a choice to become herself (Inwood, 2000a).

The third main theme comprises descriptions about painful experiences encountered during treatment, it also describes how the women felt like they were losing grip of their own ability to procreate and how it engendered helplessness as well as hopelessness. In addition, the women also recounted how the unsuccessful treatment produced a sense of grief and profound loss.

The participants undergoing IVF treatment had high expectation about the treatment outcome as it offered them hope that pregnancy will ensue. Nonetheless, IVF treatment has its own set of strict treatment regimen as it involves invasive procedures that can be physically and emotionally demanding. In view of this, women seeking IVF treatment had to reschedule their plans in order to conform to the routines of the IVF care. This study revealed the complexity of the challenge's women diagnosed with infertility face when seeking IVF treatment. *Thrown* into a *world-of-motherless*, they entered the *world* of ART in search of *meaning* of their lives imposed by infertility. The women shared, with great honesty, the painful and intimate experiences of infertility during the treatment and the meaning they have acquired during the process.

The motherless emphasised the bio-psychosocial influence on their very existence. The study further revealed that all the women also suffered a great deal with the several other features of the IVF care especially, from the numerous and painful injections, and after the oocyte retrieval. Most of the participants mentioned weight gain as a direct sequel of the combined effect of the IVF medication and the experience of distress; others, like **Francisca**, found that as a fair person the drugs had change her skin colour, in addition to the many tissue marks and blemishes caused by repeated injections. **Isha** and **Akos** could not walk properly due to the repeated and painful injections. **Juliet** also complained of general bodily weakness, burning sensation and scarring of her skin. **Mavis** complained that the injections were killing her slowly and caused her great anxiety. This brings to the fore the fact about IVF treatment as a somatic or biological process quiet literally makes such a lasting impression over the short period of time.

In many societies in Ghana physical appearance which is greatly valued and expressed as a vital female identity. The disturbances in body image also affected their very existence in the world.

This finding validates with previous studies in Turkey by Boz and Okumus (2017); Durgun-Ozan and Okumuş (2013); Hammarberg et al. (2001); Peters (2003) in Australia, Mosalanejad et al. (2014), in Iran; Ying et al. (2015), in China. The researchers also reported that women experience more challenges during all phases of the IVF cycle.

In addition to lifestyle and physical challenges, the motherless also reported varied reactions in terms of negative feelings such as intense sadness, self-insufficiency and sense of jealousy, depression, extreme irritability, guilt,[18] and anger[19] and self-blame. The disclosure of a negative test result was also described as the most frustrating and painful experiences they had ever encounter in their life. In spite of such challenges they persisted by carrying on with another IVF cycle with the hope to have a positive outcome this time to be significantly disenchanted by another loss.

The findings of this study suggest that IVF patient may appreciated some concrete support due to enormous emotional intensity as a result of the exhaustive treatment process. One such challenging emotion is that of self-disappointment and insufficiency when one is not able to fall pregnant and subsequently give birth to a healthy and bouncing baby.

The women acknowledged how they felt like they were losing control over their reproductive ability and their lives and how these generated feelings of powerlessness. They described the personal frustration experienced from the inability to effect a change over their fertility loss and treatment outcome as well as future choices.

Another common sub-theme identified from the conversation is sense of grief and experiencing profound loss. For several of the women they never dreamt of experiencing difficulty in conceiving a child in their entire life. They believed that their problems were as a result of previous sinful act that is why they were being tested by external forces or by the Supreme Being.

For many of the participating women, this loss gave them the wakeup call and their initial realisation that their live course was not progressing as envisaged- a situation that made it even more difficult to accept and cope with the dual misfortunes of infertility and IVF failure for that matter. The motherless were very sad with the diagnosis of fertility loss and its associated treatment failure as they thought that not having children was not the future they had imagined. Like **Lois** said she did

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[18] Guilt: Heidegger views as *Angst*
[19] Anger: Heidegger's term for *Angst*

not anticipate of having problems concerning child bearing and giving birth since she was a virgin when she got married.

Others redirected their anger at persons who claimed they comprehend and appreciate their emotional reaction due to their loss and predicament when they have never gone through gone through such situations before. While such reflections are ongoing, another depressive thought on other lucky women who actively terminated unplanned and unwanted pregnancy impinged on their mind exacerbating the already negative emotions. **Juliet** found it difficult to face the loss and was not able to tolerate and accept the loss at first, as she said she was still young and could not comprehend why she was suffering.

Observations by these women pointed to the fact that several of them were seriously challenged by the loss of life goals of their very existence, loss of not experiencing pregnancy as a woman, and felt that experience a sense of lack of control over their own affairs.

Grief is a universal emotional reaction to losing a loved one (Stroebe, Hansson, Stroebe, & Schut, 2001). There is a consensus within the literature that one of the most crucial experiences following unsuccessful treatment is grief. Grief responses to infertility and pregnancy failures following ART treatments have been well documented (Harris & Daniluk, 2009; Johansson & Berg, 2005; Lee et al., 2010; Lukse & Vacc, 1999; Volgsten et al., 2010a). Invitro fertilisation (IVF) treatment has giving women who are diagnosed with fertility problems hope and potential of bearing their own child. Nonetheless, the treatment may fail, which often may result in women becoming more susceptible to intense sadness. Whenever the waiting period was followed by a negative pregnancy report, women have higher grief responses as if they have lost a child. With the passage of time and several attempts with success, the circumstances take a different turn with a reappraisal of the loss.
Kübler-Ross' (1969) framework on bereavement has been applied in IVF treatment. Lee et al. (2010) determined reactions to emotions of women experiencing pregnancy difficulties and receiving treatment and how they cope with the loss of failure of the treatment.

The study applied Kübler-Ross' (1969) five stages of grief[20] to the grief responses to women with fertility challenges undergoing IVF treatment.

The authors found that the emotional responses following unsuccessful IVF treatment followed the grieving process described by Kübler-Ross. Their study elicited a number of common grief reactions of bargaining, and acceptance followed by depression, anger, *(Angst)* as well as denial and isolation in that order. The authors claimed bargaining appear to run through the whole grief reaction and ended by accepting the reality while they try to fall pregnant.

The participants in my study reported experiencing intense sadness after attempting IVF treatment which resulted in failure. The women described feeling hopeful when they entered the IVF treatment journey and ended up with disappointment, as well as deep sensation of desolation following the failed IVF treatment. In contrast to the hope they felt before each treatment, the participants described feeling devastated and completely awful when the IVF treatment failed. Several participants spoke about a failed treatment as a bereavement and described that they grieved for their loss. All the participants reverted to crying as if they were mourning a dear one after they have been told the procedure was not successful. The participants reported being highly invested in the treatment hoping pregnancy will result. Likewise, Harris and Daniluk (2009) study reported similar findings in the United Kingdom.

As reported by previous research Harris and Daniluk (2009); Johansson and Berg (2005); Lukse and Vacc (1999); McCarthy (2008); Volgsten et al. (2010a), women diagnosed with infertility undergoing treatment maintain high level of hopefulness each time and bargaining (that is achieving successful pregnancy) however, it is advisable to reduce stress to boost the success rate following subsequent treatment.

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[20] Kübler-Ross' five stages of grief: (i) denial; (ii) anger; (iii) bargaining; (iv) depression and (v) acceptance (Kübler-Ross, 1969).

Lee et al. (2010), proposed three main ways women use to cope following unsuccessful IVF treatment namely: (i) confrontative method (whereby they try to acquire important information about the problem which can help them resolve it); (ii) optimistic coping (wherein the women use positive thinking hoping things will improve) and (iii) self-reliant coping method (whereby they attempt to deal with the problems by keeping to themselves in their solitary moment). It was evident from the findings that the women participating in this study resorted to more practical activities such as using problem-focused method than covert mood method like emotion-focused coping approaches to survive the psychological and social repercussion of the IVF loss.

In keeping and agreeing with conclusions of Lee et al. (2010), the women in my study used variety of coping strategies including self-motivation, reading the bible and praying to the supreme being, talking to colleagues in the same situation, friends and family, and facing up to the problem. The mode of managing with childlessness and challenges its treatment were perceived by the women as very trying *existential* emotional challenge.

Surprisingly, despite the intrusive nature of the procedure, all the women in this study did not want to terminate the IVF treatment but rather continue with treatment until they achieve conception. It was realised from the phenomenological conversation that some of the women like **Mavis** and **Lois** had done five or more unsuccessful IVF cycles and were still resolute on participating in another sequence of treatment. **Juliet**, **Akos**, **Francisca** and **Isha** were still hoping to go for another cycle in due time. The findings proved that bargaining was the central reaction to the loss which was very instrumental in helping them survive their ordeal and accepting to continue the treatment until they achieve their future life goal.

A similar result was also found by Ying, Wu and Loke (2015) that even after five IVF treatment cycles some Chinese couples were still unwavering to undergo another sequence of treatment irrespective of the challenges. The women did not want to discontinue the treatment or adopt as they anticipated that will be going to be successful in the future. In my study all the women were persistent in pursuing IVF treatment even after the failed IVF attempt with the hope of becoming pregnant. They were consoled with the fact that they still had some of their frozen embryos left for them to undergo another cycle. Hence one of the strengths of this study is that the women did not want to discontinue the treatment or adopt, unlike the work of previous studies where the participants had giving up hope and discontinued treatment (Johansson & Berg, 2005; Volgsten et al., 2010a).

Lee et al. (2010) concluded that their study findings which determined women's reaction to grief and how they cope following IVF with treatment failure may be of benefit to both patients and IVF care professional when the latter to offer better care and support for patients with fertility treatment.

In a Swedish study by Johansson and Berg (2005) exploring the experiences of women two years after ending IVF treatment found similar results. The study revealed that, the very existence of women's live two years post IVF failure is 'life-grief', which they described as not only the grief of privilege to have children (inauthenticity), but also not being able to carry on one's family line, and to establish that kind of relationship of being a proud mother (Johansson & Berg, 2005, p. 60).

The findings of my study also revealed that the women lamented the unattainability of the role being in the mother world as children are held as the real significance in a Ghanaian household. Remarkably, the findings points to the fact notwithstanding modernisation, the Ghanaian society still holds of the belief that marriage should of necessity produce biological children to perpetuate their family's existence. The women described how they involved themselves in varying preoccupations to encourage and generate their pre IVF optimum emotional functioning. In Johansson and Berg's, study, the central theme- 'hope of fallen pregnant' is remarkable to the women's experience. The women hold the belief the optimism of falling pregnant was very much alive and may deliver a healthy child even after ending treatment.

In Volgsten et al. (2010a, p. 1296) Swedish study, the theme of 'unresolved grief' was a predominate finding as most of the participants reported that three years after discontinuing treatment, they were still not overcome the losses incurred. The couples in the study reported feeling both surprised and unprepared for the grief they felt following the end of treatment, and as such few had sought out any form of professional support with this. Although the findings from Volgsten, Svanberg and

Olsson's (2010) research suggest that a failed conception attempt can lead to a prolonged phase of mourning and distress. In my study, some of the participants were able to overcome this distress by taking active steps which directly contributed to and maintained their hope and optimism to continue another cycle. The participants in Volgsten, Svanberg and Olsson study also reported symptoms of depression, including lack of self-esteem, feelings of worthlessness, guilt, and blaming oneself for being childless. These feelings came out strongly and eminent in the women's narrative in my study.

Another significant finding in my study involved the extent to which the losses associated with failed IVF treatment were described as silent and invisible losses. The nature of the IVF related loss is perceived not visible or have no substantial value. The reality that nobody acknowledged the perceived loss also contributed to their aloneness. This kind of illegitimacy can therefore be inferred from within the context of 'disenfranchised grief' as described by Doka (Doka, 1989, 2002). This concept culminate the social characteristic of grief in which the individual experiences a loss without the legitimate prospect of openly mourning. In these instances, the grief is disenfranchised. This suggest that grief that is not accepted openly is considered intricate, and can lead to intense emotional reactions which will in effect difficult to come to terms with. This has also be documented by previous studies (Harris & Daniluk, 2009; Lee et al., 2010; Peters, 2003).

Similar findings have also been reported by McCarthy (2008) who found out that infertility loses and its treatment has no value in the society. The kind of loses is a fantasy and for a better expression, a lost hope of a conceiving a dream child than the death an actual child which of necessity elicits legitimate active public grieving process where society recognises and validates.

It is believed that the women often grieve in solitary for fear of being misunderstood from the public as legitimate. There is also universal agreement with findings by McCarthy's that suggest absence justification from significant others caused IVF patients to interrogate the acceptability of the intense reaction to their loss which exacerbate their grief. The women also complained that it really upset them when other people misunderstood the complexity of their challenges.

The participants in my study also reported having this kind of emotional reactions and suffering when IVF treatment fails (McCarthy, 2008).

Even though evidence from past studies point to the fact that failed IVF attempt can prolonged the grieving process and mourning for a dream child (Lee et al., 2010; Verhaak, Smeenk, Evers, et al., 2005; Volgsten et al., 2010a), participants in my study were able to stand up to this emotions by assiduously focusing on equally and other important life goals.

Lukse and Vacc (1999) identified the sequence of the grieving process and the mode coping by patients with fertility problems with at least a failure at IVF attempts (see page 31). Findings revealed that both groups of women studied by Lukse and Vacc experienced intense depressive symptoms throughout the course of the treatment and after failed outcome. Similarly, my study findings also concurred with Lukse and Vacc (1999) findings, who reported that women with failed attempt with IVF failure expressed intense emotional reactions of grief and depression before, during, and after treatment.

Mode of *being-undifferentiatedness*

Heidegger's 3 Modes of *being*	**Lived Experiences' Phenomenological Themes**
Undifferentiated everydayness of (being-in-the-world)	**Living with infertility (*being-in-the-world-of-motherless*)** • disruption in projected course of life • being an outcast *in-the-world-of-motherhood* • reality acceptance of *being-in-the-world-of-motherless*

Taken from Table 6 on page 106

Major Lived Experience Theme*:* Living with infertility (*being-in-the-world-of-motherless*)

The third mode of *being* described by Heidegger is *undifferentiatedness*-that is *Dasein* every day way of living it life in-the-world. In this mode of *existence* (Existenze) *Dasein* is neutral and indifferent towards the suffering of individual.

This main theme includes descriptions about how the participants pursuing IVF treatment has affected their daily course of life. They stated that being in the treatment interrupted their everyday way of living and described how they lost some jobs in the process and had to close their shops. The women described how being on IVF treatment impeded with everyday life and important relationships at home and work. They spoke of how their daily lives were filled with the consciousness of having a baby and postponed an important life goal all in the name of having their own child which had a significant impact on their quality life. The participants interpreted this kind of lived experience as one of feeling bound or tied down in search of looking for a lost soul all in the name of having a child. Some women even, closed their shops to undergo treatment. Others had to take leave of absence which did not fit into work to enable them regular visit to the clinic for their daily injections and routine scans. Some women also said the arrived at work late and sometimes had to lie to their managers for them to remain employed.

Comparable outcomes have been described earlier in studies by (Durgun-Ozan & Okumuş, 2013; McCarthy, 2008; Peters, 2003; Ying et al., 2015) suggested that the duration of IVF interventions will disrupt their daily activities. In addition, the women in my study talked about how IVF treatment had taken over their life completely and made planning difficult.

For instance, **Juliet** had to take her leave which didn't fit into work schedule since she could not combine work and IVF treatment so she had to force and go on leave. Like **Akos** and **Lois** they took a leave of absence from work after the transfer which they had not plan for. **Mavis, Isha** and **Francisca** also recounted that staying at home did not really help them at all as they lost lots of customers. The women reported they could not even think about or plan anything tangible. This greatly affected their career.

All the women spoke of being an outcast in the-*world-of-motherhood*. The social isolation that the women experienced whilst undergoing IVF treatment had the most influence on their level of standards and happiness. The women also found being it difficult to socialise especially where friend who were pregnant had gathered with families with children. This was a cause that exacerbated the loss of a dream child when the treatment was not successful. They also could not tolerate conversation around childlessness.

The findings from my study further indicated that women with infertility intentionally isolated themselves from people especially their friends and declined invitations to social functions such as funerals, weddings and naming ceremonies. In these circumstances, many women felt marginalised and alienated (Harris & Daniluk, 2009; McCarthy, 2008; Peters, 2003).

Juliet felt alienated in the company of her colleagues and felt unable to converse with them when children is the subject matter. **Lois** expressed the same sentiment that she had become very distant from people, and that her interaction with people have changed from the way it was. **Francisca** also recounted feeling angered by her co-workers and family members with their persistent questions about strategies concerning childbirth. It can, therefore, be inferred from the women's conversations that interacting with other people was distressing and had the potential to impact negatively on the emotional disposition of the women. These situations may aggravate and lead to social isolation and a sense of failure as their lifelong expectation of having children generally remains a taboo in Ghanaian communities.

The participants also described grappling with questions of what *meaning* and value their life held if they were not a mother, and with feeling like an outsider in a social context in which motherhood is considered normal for married couples. Some participants spoke about how the failed IVF treatment and shattered dreams for biological children forced them to question the purpose of their life. They described that having children had always been their desire, and that failure to achieve their dream left them questioning how they would give *meaning* to their everyday lives. Others described a kind of *existential* life crisis of *meaning* of their lives and do expresses feeling of emptiness.

This also had a great effect on their identity as a woman (*authentic self*) since becoming a mother is generally viewed as fundamental mature feminine uniqueness (*Dasein*). The findings of this study strengthen the conclusions made by McCarthy's (2008) that the challenges of childlessness involve not only grief, but what she described as an 'existential crisis' McCarthy (2008, p. 324) which require them to review their life to make sense of one's identity (*Dasein*) and making *meaning* in their *being-in-the-world-motherless*.

McCarthy's (2008), phenomenological study offers a more in-depth investigation into the experiences of women with fertility difficulty and pursuing treatments. The author highlights that in addition to grief, the participants were also faced with an *existential* crisis of trying to understand their very existence without biological children and that participants were at different point of resolving these challenges. Based on the results the author concludes that health professionals need to pay more attention to long-term spiritual, psychosocial, and emotional influence of infertility in assessing the total welfare of women suffering from infertility beyond the treatment phase.

Heidegger suggested that *meaning* (*Sinn*), is whereby things show up for themselves in terms of which something becomes explicable as the thing is and can be related by how human beings perceive and interpret events in their world view *(das Man, They self)* (Carman, 2003). Indeed, Heidegger claimed that the world is not a thing, but it is the interconnected relationships from which things acquire *meaning* and appear as *meaningful*. Heidegger argues that, *meaning* is situated in the *entity's* mode of appearing, as things do not appear in isolation, but are always revealed to persons in his or her own world (Johnson, 2000). The women in my study attached important in childbearing and the *meaning* of motherhood that is why they did everything possible so that they can belong to *the-world-of-motherhood* by undergoing tedious IVF treatment.

Reality acceptance of *being-in-the-world-of-motherhood* was an equally important sub-theme which was often quoted by most women. Surviving desire for child birth was more often reiterated by most of the women. In this study motherless recounted some degree of recognition of being infertile following unsuccessful IVF treatment. Luckily, all the women were able to recover from this further blow to their confidence and decided to undergo a further IVF treatment in due time.

Majority of the women managed to came out of their loss fully recovered to a more optimistic mood recommencing their normal life. Happily, their intense sadness over failed IVF treatment was not short-lived the fact that they had their frozen embryos left to start another cycle.

They recounted accepting the realities of the outcome of the treatment in unique fashion. This experience described by some women as becoming more spiritual included acknowledging any regrets and re-prioritising other important issues in their life whilst waiting to undergo the treatment in due time.

Nevertheless, the women expressed some positive outcomes from the IVF treatment. With respect to past research indicating that living through unsuccessful treatment may generate feelings of personal growth and gain (Harris & Daniluk, 2009; Su & Chen, 2006). The participants in my study did talk about gains, particularly in relation to strengthening their relationship, and feeling stronger as a person for having survived through this tedious journey of infertility treatment. In fact, the women stated that they have discovered positive outcomes of grief from their lived experience, and even to the extent of suggesting that this kind of loss can become growth enhancing and help individual to adapt

Several of the women saw IVF treatment as a blessing, and welcoming alternative for women living with fertility problems. The women described their experience that their faith and belief that somebody greater than themselves is watching over them has been a sustaining force. Accepting and relying on God’s will also helped them to acknowledge the possibility that there is hope for the future and that there is a God who never fails.

The findings of my study affirm Harris and Daniluk’s, assertion that women undergoing IVF treatment established that they had become more resilient and equipped to handle unforeseen and sudden bewildering life events in the long term (Harris & Daniluk, 2010) .

Summary

To summarise, the findings suggest that first of all the entire process of IVF clinical management was an intricate one for them. From the patient's view point they oscillated between high expectation and a sense of choice and mastery for the situation on one hand and disappointment a sense of vulnerability on the other hand. The hope of becoming pregnant was described by the women as crucial during the phenomenological conversations. The results revealed that even though all the participants had experience failure they had resiliently kept on hoping they might fall pregnant in the near future the fact that they were young and still menstruating and having some of their embryos kept to start another treatment cycle.

Another important revelation was that the women preferred to keep the medical intervention concealed from the public as much as possible when undergoing IVF treatment. The burden of infertility and its treatment and attendant stigmatisation may destabilise a sense of self-worth. Hence, the participants chose to keep their treatment a secret to prevent their children from being stigmatised as well as protecting their identity.

The participants' phenomenological conversations and their narratives revealed a range of challenges that Ghanaian women endure when going through IVF treatment. Throughout the phenomenological conversational transcripts and the interpretive process, there was an overwhelming collective impression that IVF treatment had been very demanding and negatively impacted on every facet of their very existence.

This clearly demonstrated that there is an immediate realistic detailed as well as organised programmes to ensure a successful IVF treatment. Understanding the women's experiences may go a long way to help IVF care givers improve their client focused services in the Ghanaian context. To effectively protect and render effective care for women with infertility problems, it is vital that nurses understand infertile women's physical, psychosocial and educational needs including those of husbands and families.

CHAPTER SEVEN

Loss and Grief in Ghanaian Women who have Experienced Unsuccessful IVF Treatment and the Application of a Revised 'Dual Process Model of Coping with Bereavement' (Stroebe & Schut, 1999, p. 213)

Introduction

This section brings the knowledge acquired so far on women's phenomenological conversations and the interpretive process, which produced result highlighting relations to an existing coping model with bereavement. This model may assist to effectively address the growing need for preparing upcoming women who are living with fertility problems and seeking IVF treatment to manage the stresses associated with IVF treatment. Little attention has been given to the application of a theoretical model in a bit to systematically explaining and understanding grieving among women who have undergone IVF treatment but the procedure was not successful.

Understanding Loss and Grief

The scientific objective step by step research into grief date as far back as the early 17th century (Parkes, 2001, 2002). Losing something that one holds in high esteem and grieving over it is inevitable human life. Although the term loss relates to individual who are dead, the wide-ranging notion of loss has been used to conceptualise many non-death related life experiences and events. In life most significant suffering from losses can alienate us from the very essence of who we are and start a re-learning course of action towards ourselves and or the world as whole. It is fundamental for most individuals find meaning and to make sense of any loss.

Consistently nurses usually work with individuals and families who are bereft, hitherto many nursing programs do not require courses in bereavement and end-of-life (EOL) care. Healthcare professionals rendering ART services typically rely on recommended therapeutic communication techniques and tools that are helpful in promoting therapeutic communication, while emotionally supporting women seeking infertility care. Understanding the process and theories applying grieving and loss, may enhance the knowledge of how this information can be practice thereby improving the person’s ability to function. The dual process model is intended to help complement IVF professional’s knowledge concerning existing grief theories and their practice setting. This information will provide nurses with a theoretical underpinning on which to build effective medical mediations.

Loss is a normal and unavoidable part of life, whereas grief is a healthy and acceptable response, passionate reaction to loss. (Stroebe, Hansson, Schut, & Stroebe, 2008).

Dunne explains loss simply as the act of having lost or losing something, being deprived or being without what we prefer to keep (Dunne, 2004).

Loss as defined by Peretz, is an act of being deprived of or being without something one has had and described in four diverse ways: (i) ‘loss of a significant other (either in whole or part, everlasting or temporary), (ii) loss is a feature of the self, (iii) loss of an peripheral object, and (iv) Loss is developmental’ (Peretz, 1970, p. 4).

Grief is a Latin word “*gravure*”, which translates as denotation burden or suffering. It is emotional reaction to loss that draws us towards something or someone who is missing, and the extent and how long the grief response takes place has everything to do with how dear one holds what is lost (Parkes, 2001).

Grief describes an individual’s reaction to hurt in its entirety and encompasses behavioural, mental, physical, social and religious dimensions of natural responses (Greenstreet, 2004).

Stroebe and Schut (2001) described grief as a complex emotional syndrome, a reserved and extreme experience (Carroll & Coetzer, 2011) that may be constructed at personal level and at societal level (Neimeyer & Hogan, 2001). Thus grief and loss can be comprehended as an actual of losing a dear or loved one or something valuable possession.

Manifestation of grief comes in various ranges comprising of physical, emotional, psychosocial, and behavioral reactions. An individual's unique responses to a loss or death of a loved or dear one is contingent on several issues, such the characteristics of the person uniqueness, available resources to deal with the loss, coping strategies, the societal values and norms, previous experiences, how the person died, whether a male or female, the effect of the loss and relationship to the deceased (Buglass, 2010).

This grief work draws heavily from Stroebe and Schut (1999) Dual Process Model (DPM) theory of bereavement. The authors view grief as a reaction to stress where dynamic method of coping labelled "oscillation" could be used to decrease the grief reaction in response to what is significantly lost. The (DPM) provides a useful structure for considering unique challenges of stressful life events and help allow the bereft adapt to the loss in order to move on with equally important life goals and roles. This theory evades the one-sided appraisal of grief theories allowing many concurrent experiences of loss to exist harmoniously. As people can change a crisis situation into gains it has also been established that individual suffering from infertility and the struggles of fertility treatment can be transform to growth, though the suffering may not be eliminated completely, but it co-exist peacefully making meaning out of the challenges.

Therefore, there is the need to resolve the challenges associated with infertility treatment in order to enhance total welf*are* and wholistic health (*Dasein*). Consequently developing culturally and equally relevant theories and model in the Ghanaian context will go a long way to address the needs of individuals seeking fertility help through ART.

The Dual Process Model

Psychologists Margaret Stroebe and Hank Schut introduced the DPM as a substitute from step-centered based theories. This model seeks to respond to the critique of previous models that described grief as a series of stage based approach and rather focusing on how the person react and respond the loss. The model originated as an effort to understand consistencies in handling challenging issues. It encompasses a broader conception of adaptive coping and recognises that both the expression and control of emotions are important in adjusting to the loss.

The DPM method views losses and significant life events as growth enhancing, implying the bereft has the opportunity to embrace a new way of reappraising the world which hitherto, had been taken for granted.

The DPM (Fig. 7) is deemed a rather all-embracing theory of loss which integrates major prevailing scientifically concepts found in interrelated areas such as attachment and cognitive stress theories (Folkman, 2001) rather than postulating totally new replica (Stroebe & Schut, 1999, p. 198). An essential difference with previous models has to do with the fact that the DPM is based on the tenet that when people are grieving, the way of coping delineates two wide-ranging categories of external events that causes stress: 'loss-oriented activities' and 'restoration oriented activities' (Stroebe & Schut, 2001, p. 57).

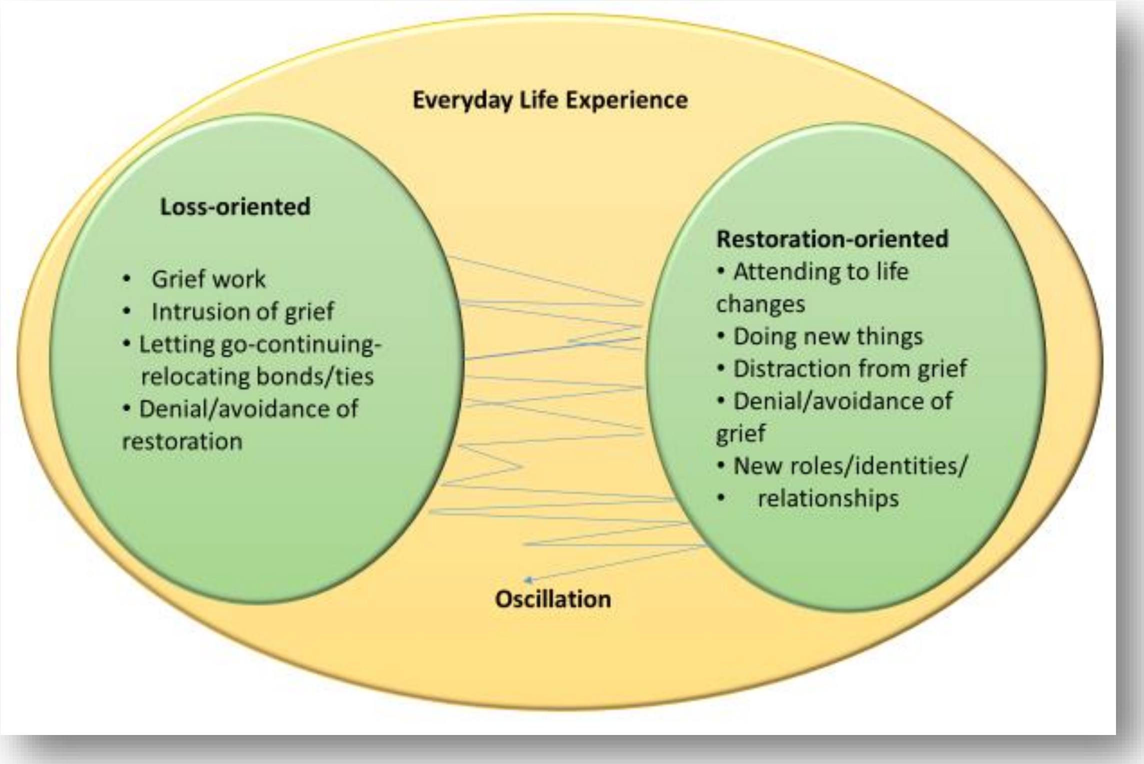

Figure 7: The Dual Process Model of Coping with Bereavement (Stroebe & Schut, 1999, p. 213)

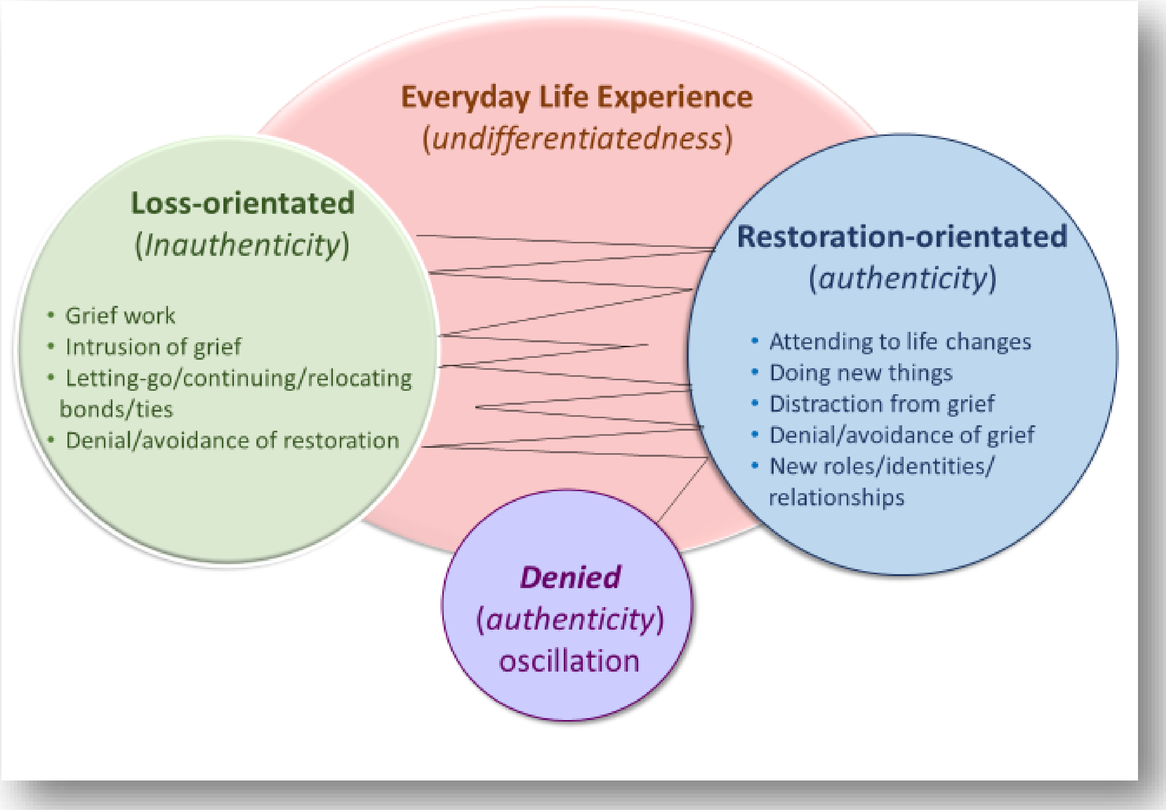

Figure 8: 'Dual Process Model of Coping with Bereavement' (Stroebe & Schut, 1999, p. 213) Adapted For Heidegger's Three Modes of *being*

The 'loss-orientation' Stroebe and Schut (1999, pp. 212-213) relate specifically to the person who has lost something significant. It describes the person's concentration on the loss, acceptance of the suffering and dealing with, some part of the loss itself. This loss encompasses grief work, which involves mental processing of the loss, such as being engrossed with the death, meditating and yearning for the person who is dead. The bereft demonstrate related behaviors, such as crying, experiencing extreme sorrow, rage or renunciation, and contemplating on dwelling on the states leading to the demise, visiting places or listening to music that triggers sorrow and avoiding renewal activities.

The 'restoration-orientation' Stroebe and Schut (1999, pp. 213-214) refers to attempts to sort through various secondary losses about lifestyle routines and new ways to adjust to the situation.

Losses such as financial repercussions as a result of IVF treatment and how they are handled, coping with everyday life experiences, are considered as secondary losses in the view of the proponents this theory. These changes enables an individual revise their world view in order to accommodate the different circumstances. Stroebe and Schut (1999) posited that movement toward 'restoration-orientation' provided relief from suffering by limiting the extents of suffering that one can withstand at any point in time, thus preserving the mental health of the bereaved person Stroebe and Schut (1999, p. 214)

Consequently, the 'restoration' Stroebe and Schut (1999, p. 214) explains the process through which the bereft come to terms with the loss (Stroebe & Schut, 1999).

Another unique feature of the DPM is the 'oscillation' that transpire two extremes on the same continuum. They expatiated on their model by substantiating with the fact that the bereft will swing between two emotional activities labeled loss and 'restoration–orientation' (Stroebe & Schut, 1999, pp. 215-216) For instance, the person will on certain occasion deal head-on with the feeling of the loss and on another circumvent the direction of a more positive recovery 'restoration–orientation' related activities (Stroebe & Schut, 1999).

The final component of the DPM is described as cognitive coping which is based on the idea of Folkman's 2001 model of cognitive processes. Basically Stroebe and Schut define the implication and different kinds of articulation that replicates positive and negative coping (Stroebe & Schut, 2001, pp. 63-64). They have included rumination and positive reappraisal meaning how individual who have experience significant loss adapt to the situation in the wake of the loss. For instance pain increases whenever negative emotions such as despondency takes control of the person but recedes when he/she start dealing head on to come to terms with the situation, For example, grief is heightened when negative affect, such as sadness dominates. Equally, positive reappraisals is maintained when the bereft adapt well to the problem is necessary for adaptive coping.

Relationship of DPM to Grief Reaction Following IVF Treatment Failure

Individuals diagnosed of infertility, and subsequently pursuing ART procedures experience a deep sense of emotional and physical strain in their world. Infertility can have a significant psychological impact on women who are infertile as they experienced profound loss upon the diagnosis of infertility and following IVF treatment failure. In vitro fertilisation treatment, which can help women who are infertile to realise their hopes for a family, nonetheless, it said to be time- consuming, substantial financial strain, and energy which may not result in the wish for a dreamed child. Women often experience intense emotional reaction due to the multiple stressors and losses brought on by infertility care. The women who participated in this study indicated that undergoing IVF treatment program is the most challenging situation they have ever encountered.

In vitro fertilisation treatment is conceptualised as a stressful and tedious process and failure to achieve success could be a specific unavoidable disappointment. Feelings of grief and loss associated with unsuccessful IVF treatment could be difficult to come to terms with the loss, unlike bereavement, the losses are invisible. The lack of public acknowledgement and the financial repercussion may also exacerbate the situation.

Women who endure a failed IVF treatment are likely to have their experiences treated as trivial, invisible, or as if they did not happen. Arguably the DPM deemed a suitable tool in conceptualising of grief associated with loses as result of unsuccessful IVF treatment procedure. The women were of the view that they were very hopeful that the procedure will help them fix the problem of infertility and when the treatment turn out be unsuccessful they were sad and cried bitterly as if they have lost a child as they perceived the failure as unique type of loss. In these circumstances, the women experienced psychological and emotional strain, and a number of ways to overcome the challenge or may lose control and move on with life with damage than ever.

Within the formulation of the DPM, the proponent explored the forces at work within coping experience to gain a deeper meaning of how people who have experienced a loss regain emotional control in their lifetime.

To understand how *meaning* is reconstructed, one must understand how a sense of meaning can be lost when a loved one dies. Within this DPM, the loss-oriented recovery phase directly related with the person who has actually experienced the loss, in this case the women who experienced unsuccessful IVF treatment whereas the restoration–orientation activities is geared towards less important distress focused on secondary stressors as a result of the loss (for example the change in personality as a woman (*authentic self*) since womanhood is deemed as essential to woman uniqueness (*Dasein*). Applying the concept of Heidegger's notion of authenticity to the DPM means that the women accepted their situation, made a resolute decision to face up to their own experience, and all the feelings, moods, possibilities and dread that goes with the IVF journey. Consequently movement towards restoration provided relief from the loss of a dreamed child. Authenticity then is a way of being with others in which Dasein chooses to take responsibility for itself and take care of itself. Again, all the women complained about secondary losses such as financial repercussions and non-reimbursable financial expenses of IVF treatment and the believed that ART procedures can help fix the infertility problem. Similarly the loss-oriented relate to *inauthentic existence* where the women experienced significant loss. They face up to their profound longing for a child, their vulnerability of being seen as not able to have children, their fear of what people might think about them having IVF treatment, then the struggle of going through the treatment while trying to live a normal life, the financial burden of debt associated with the loss. Yet, they behave as expected but do so knowing that is not how they are feeling. Observations from the women suggest that they have really suffered with the loss of life goals, loss of not experiencing pregnancy as a woman, and subsequently becoming mothers.

Participants' narratives indicate suffered deeply in the course of the IVF procedure and after wards and making meaning. For these women in this study, they constantly oscillated between high hope when they began treatment and great despair when the treatment was not successful. All the women repeatedly reported a sense of incompleteness. For instance, the women will sometimes challenge the situation emotionally or, accepting the reality of the problem in approval of 'restoration–orientation' related phase of recovery. They moved between grieving, try to adapt to the loss so as to continue other equally important preoccupations. In this case the women were denied authenticity of belonging to the mother world.

Luckily, their anguish over IVF failure was short lived as all the women were able to recover from this blow and decided to undergo a further IVF treatment in due time. Several of the women regained quickly their emotional composure and returned to normal healthy life and facing up to the *Angst.* The women then reorganised themselves by accepting the reality of *being-in-the-world* of motherless and reordering their life in order to undergo another cycle.

The unique oscillation process fundamental to the DPM is well evident in the participants' stories. Both directions produce distress and can linked with uncertainties and negative emotions (*Angst*) in the realities of IVF programs.

The women who experienced a dilemma of IVF treatment would vacillate quickly between these two negative and positive directions of loss and appraise their thought in each directions. With support and acknowledgment, there is a potential for meaning making between the two types of orientations. This transition will allow the individual to experience rumination and positive reappraisal as they move through their emotional states to address the meaning-making within their loss (Lister, Pushkar, & Connolly, 2008).

As the women oscillate between the two approaches, avoiding the loss and resultant feelings, they found meaning in their suffering and accepted the reality of the loss in order to move on. As Strobe and Schut noted, dwelling in intense suffering can result in severe mental consequences; hence, moving beyond the pain both allow for acceptance of hurt feelings and engender emotional restoration (Stroebe & Schut, 1999).

The belief that growth can emerge in the wake of stressful life events has been recognised (Harris & Daniluk, 2009).

The women in my study described how they made a tremendous sense out of their suffering and found purpose and make sense in their life despite the terrible loss of their experience.

Notwithstanding, the result from my study indicated that the women expressed that they have something positive from the IVF treatment encounter besides the losses incurred. In *essence,* the women stated that they had discovered positive outcomes of grief as result of their loss, and even voiced that one can encounter an *existential* growth after experiencing intense loss and making sense of their experience.’

Summary

The DPM is more flexible and more sensitive to cultural differences. The DPM acknowledges the distinctiveness of everyone and how culture, religion and sex may influence the way a patient expresses emotions during a loss. Healthcare professionals involved in the ART services should develop programs to suit the individual’s peculiar needs, and the circumstances leading to that specific loss thus highlighting the individual peculiar grief and loss. The IVF carers need to ensure that they respect the uniqueness of the individual and offer appropriate, sensitive support and wholistic care to persons who are bereft at this challenging time.

The participants in my study used ‘restoration-orientation’ (Stroebe & Schut, 1999, p. 213) method as an adaptive response to stressful events of IVF treat following unsuccessful IVF treatment. It is recommended that the healthcare professionals providing fertility services need to be conscious and understand the various issues that can influence the grieving process and offer appropriate patient-centred fertility the needed care and support.

The DPM can be a valuable guide for preparation of patients IVF treatment. The model may allow IVF carers to come to a shared understanding with women regarding their perception of a life experience and to help in considering both the gains and losses associated with their experiences.

Understanding the range of grief models can also IVF care providers deliver offer a thoughtful and varying degree of reactions associated with the loss, and knowing when a patient needs extra care (Field & Payne, 2003). Healthcare professionals should also be knowledgeable on what the patient accepts as the cause of what they are experiencing to be able to assist them express appropriate emotions. Preparing them this way may enable them to be more responsive and acknowledge the range of reasonable responses to loss.

Even though the theory proposes usable knowledge on how people grief the loss of a loved one, critics have complained about overemphasizing the aspects of cognitive processes to the neglect social interaction.

From the foregoing, it is rational to come to a conclusion that grief is a unique experience and a special type of loss and understanding the concept may help consolidate how people adapt to the loss of a significant other. However it is believed that no single type of loss and grief theory is defensible.

CHAPTER EIGHT

Reflection on the Phenomenological Journey

Introduction

This closing chapter presents a summary of the study. I will also reflect on the research journey on the phenomenon under investigation: 'Heidegger's hermeneutic phenomenology and the application to Ghanaian women who experience unsuccessful IVF treatment'. The contribution of this research to knowledge has been stated. The implications of the study to the nursing profession and the health care system as a whole are also discussed. The strengths and weaknesses encountered during the research and the areas for prospect investigations are also discussed. The overall conclusions stated.

Summary of the Study

In general, infertility and its treatment is poorly understood by those who are not affected themselves. The detailed knowledge about the experiences of the motherless pursuing IVF treatment that this study provides therefore is valuable for clinicians, health professionals and others providing care for similar individuals. Understanding individual phenomenological experiences and the associated shared meanings can enhance knowledge, improvement in information provision, and influencing policy in providing better and quality services in the ART setting.

Phenomenological Journey

For this study, I have applied Heidegger's hermeneutic phenomenology, as it focuses on the ontological nature of *being* and how that manifests itself in the world. I chose a phenomenological research methodology as I was engrossed in discovering the motherless lived experiences of failed IVF procedure in the pursuit of motherhood. Similarly, phenomenological study has an ontological position which concerns the mode of *authenticity* and what can be known about taken for granted phenomena.

Heidegger focused on discovering universal *essences* of human *existence* and revealing the *meaning* of people's experience that may be hidden and concealed. Likewise, my study aimed to understand each subjective experiences of the motherless failed IVF procedure. Heidegger's hermeneutic phenomenology has aided in providing a more insightful clarification of the lived experiences of unsuccessful IVF treatment and the *meaning* Ghanaian in this study ascribed to their *life-world.* Utilising the philosophy of Heidegger's hermeneutic phenomenology to examine the lived experience of women's unsuccessful IVF treatment, a detailed understanding about the challenges women face in their IVF journey uncovered.

Educational Journey

This study has been an extensive academic expedition since the inception of my doctoral journey in February 2015, combining studies with work. Conducting this qualitative phenomenological study has been exciting and fulfilling as many of what I have learnt and experience many unfolding events in the course of this study. One of the significant difficulty was learning to understanding, adapting and utilising Martin Heidegger's idea of phenomenology and his theoretical language. Heidegger's hermeneutic phenomenology is deemed fit for this study in seeking a profound appreciation of the phenomenon being investigated. However, it was difficult initially to understand Heidegger's terms and his use of languages as I struggle to come to terms with Heidegger's philosophy. It demands courage to apply His concept. This challenge did not deter me, with determination and assistant from my supervisor, I overcame these challenges.

Prior to the commencement of my research journey, I attended a five-day workshop about how to analyse qualitative data offered by the Department of Health and Rehabilitation Sciences (DHRS) in assisting students in analysing their data and in the write-up of their results in qualitative phenomenological study. To have a deeper knowledge of the philosophy of Heidegger's hermeneutic phenomenology, I, together with my supervisor, also consulted Dr L. Blond at the Faculty of Humanities, Religious Studies, for tutorials on phenomenology. I was also advised by my supervisor to affiliate with other researchers and scholars in similar project such as the writer's circle-where members review, discuss and share experiences on various aspects and approaches to research. This was valuable and helped me to better prepare for the entire study. In the end, I made progress and completed the study successfully.

In adhering to the philosophy of Heidegger's hermeneutic phenomenology, I upheld a self-referent inherent stance in the course of the study allowing me to bring in my pre-suppositions and lived experience to bare. Through self-reflection, I became aware of the challenges faced by the participants in relation with my own subjective experiences with failed IVF treatment and my background as a nurse. Whilst listening to the participant's narratives and during the interpretive process, a revelation of my struggles and challenges at a point in time was inevitable. Having engaged in interactive conversations with the participants, I understood the *essence* of the phenomenon being studied. However, having lived my own experience of unsuccessful IVF treatment helped me to understand the physical and emotional challenges experienced by the participants. This lived experience also helped tremendously to have fore-knowledge as to how to approach the participants' information obtained during the interpretive process from an insider standpoint. Consequently, being mindful as a researcher was seen as a way of *being*, that made my explorations hardheaded and enlightening experience.

Implications of the Study for Clinical Practice (IVF Carers)

The results highlighted that participants were concerned about their care needs of the IVF treatment journey. For the women, the basic feature of seeking wholistic and *authentic* care was not only about their professional duty offered by the IVF carers, but also the uniqueness within that role and how they able deliver all inclusive care and *being-there* with them. The result of my study revealed the fact that the nurses focused on routines and tasks aspects of treatment but not practising wholistic nursing care.

Women diagnosed with infertility problems pursuing ART services IVF treatment appreciate wholistic, personalised approach to receiving health care. For Heidegger, care (*Sorge*) is our position towards self and others; the basic function of nursing practice. To effectively protect and care for women with infertility problems, it is necessary that nurses poses greater knowledge about the cultural implications, physical, psychosocial, religious and educational needs of the women seeking treatment.

Nurses and midwives, as well as the counsellor at the fertility clinic, have a critical task in developing effective clinical interventions and also introducing IVF patients to alternate and supportive service such as complementary and alternative medicine (CAM) and patient support and peer groups. This will go a long way to decrease some of the challenges associated with IVF treatment

The women were of the view that some staff at the fertility clinic lacked practical know how about procedure, and felt that this lack of knowledge contributed to receiving inadequate information. To have a healthcare professional who was well-informed and competent was also crucial for the IVF experience. The study revealed that most of the nurses and midwives rendering services within the fertility clinic started working without formal training in IVF care. To remain clinically competent in improving service delivery in IVF care, nurses need to be competent in every stage of fertility services. All professional nursing staff in the ART settings need constant training not only in their areas of expertise but also in terms of emotional intelligence to be able to handle emotional and susceptibility of their patients during the IVF process. Also, nurses need to ensure that the women are adequately equipped with information of what goes into the treatment and its effects prior to the commencement of the treatment. Furthermore, as nurses are patient's advocate, they have an ethical responsibility to support their patients. This can be accomplished by ensuring that women undergoing IVF treatment have all their questions answered and are adequately prepared to undergo the procedure. This includes assessing their spirituality, cognitive status and social interventions available.

Revelation from this study brings to the fore the women's emotional rollercoaster during the two weeks window when the embryos have been transferred and expecting the pregnancy test. From the women's narratives, it appeared that their emotional needs were not being met and were not being cared for as expected. This study revealed that the women expected psychological and emotional wellness, mainly from the doctors and nurses during their day to day services.

Consistent with the findings of Pedro and Faroa's (2017), a study in SA, the study participants complained a deficiency compassionate care from the healthcare providers. The author's findings revealed that the participants needed the IVF carers to pay attention to their Psycosocial and emotional well-being throughout the treatment process.

Nonetheless, my study suggest that wholistic and *authentic* care required the healthcare professionals rendering IVF services *'being-with'* and reaching out to their emotional intelligence and showing concern for women seeking IVF treatment. Being *authentic* during the care of patients receiving IVF treatment may bring nurses to the IVF experience in delivering high-quality care.

Furthermore, the participants recurrently recalled the hurtful feelings associated with insignificant recognition of the public of their painful experiences as a result of the IVF treatments. Therefore, when considering what might help women in this situation, there is the need for the IVF cares in developing programs for increasing awareness about the problem of infertility treatments difficulties and options available.

These emotional needs and concerns expressed by the women during the phenomenological conversations could be used by the IVF health carers to institute measures to promote a focused care in the ART settings. Considering the emotional needs and psychosocial support of IVF patients can help in creating a more stable and supporting therapeutic relationship between IVF service users and their carers. This may as well provide them with quality information rich material and support peculiarly tailored to match their IVF care needs.

It is also vital for the nurses and the counsellors at the fertility clinic to be trained and fully equipped with different ways to engage the women during the two weeks waiting period and after negative pregnancy test is disclosed. The interests of incorporating psychosocial support care into standard medical programme have also been documented as helpful (McCarthy, 2008).

The study revealed that women regularly maintain high levels of hopefulness of positive treatment while undertaking IVF procedure. At the beginning of treatment, the healthcare professionals, especially the nurses and doctors as well as the counsellor at the fertility clinic reassured them that IVF treatment could help them raise their own babies. This hope led to the disappointment felt by the women when the treatment was not successful, and these reassurances made them ill-equipped to cope with the grief associated with an adverse pregnancy outcome. There is, therefore, a need for the IVF carers to provide information about psychological adjustment following the failed fertility treatment might look like, and the factors which might help other women with similar experiences might be useful. All the women in this study had high hopes for the treatment being successful. Prominently there is the the need to establish what patient expect concerning the success rate of the procedure when beginning treatment. It is also may be helpful to deal with idealistic reassurances concerning success to help women adapt when negative outcome ensue.

The women described the critical role of their partner's in supporting through all the stages of the IVF treatment. To improve the treatment procedure in ART setting in Ghana, it is therefore crucial that male partners are also involved in every phase of the IVF procedure and provided with psychosocial support following failed IVF treatment. Therapeutic support together as a couple at this time would also likely help in reducing the stress associated with the treatment.

The study highlighted that all of the participants expressed their dissatisfaction and anger at the poor communication skills of some of the professionals describing the communication as humiliating, insensitive and engendering a serious sense of worthlessness. They were all alarmed and expressed dissatisfaction with the inhumane nature the information was shared to them on the day the pregnancy test was done as they needed privacy and confidentiality. The counsellor, as well as the nurses, need to be mindful of the implication the disclosure of adverse pregnancy outcome has on the women. It is therefore suggested that the hospital management review the style of communication to meet their expectations culturally.

In addition, rendering culturally competent care remains vital in the nursing profession. Nurses and midwives must employ a high level of cultural understanding and awareness to meet the needs of the ever-revolving multicultural needs of infertility care. This study could potentially equip nurses, the counsellor, as well as the physicians with the needed skills to be more culturally sensitive during their interactions with this marginalised and vulnerable population. This may also increase nursing knowledge and understanding of how to develop an effective educational programme geared towards Ghanaian women who failed IVF treatment.

Furthermore, the findings have revealed that supportive behaviours from the healthcare professionals build the confidence of the women, enabling them to undergo the IVF treatment successfully. Whereas inadequate support leads to loss of hope leading to early discontinuation of the IVF treatment. For women to feel supported and being cared for in the IVF experience, healthcare providers need to increase contact hours during their interaction throughout the treatment. The women valued being given time by the IVF carers, especially the nurses, and enacting the Heideggerian concept of *'being-with'* and *'being there'* throughout the IVF treatment journey. Of all the healthcare professional who interact with the patient within clinics providing ART services, nurses spend the most contact hours with patients therefore a good and trusting patient nurse relationship will allow patients to trust and share their perceptions, concerns, and fears with them.

The high treatment cost of IVF treatment also presented as an added burden for the participants in this study. The expensive procedure makes it impossible for the average Ghanaian citizen to afford and access the services. Infertility treatment is not inclusive in government health institutions in Ghana, patients have to pay out of pocket such as going for bank loans and selling their plots of land for this expensive treatment.

It is therefore recommended that, to make IVF services user-friendliness there is a need to make every efforts for the procedure to be covered by the health insurance, where needed so that the average Ghanaian citizen can readily access the ART services. This cost-sharing may also allow the less fortunate individuals who are infertile from accessing the IVF treatment.

The women stated that although counselling services were available most of the women who were lucky to receive counselling services described it to be woefully inadequate. Several of them approved that ongoing counselling is needed in IVF treatment and suggested staff at the clinic should increase the contact hours them in between treatments. In particular, during the two weeks waiting period and after undesirable pregnancy outcome have been disclosed. All the women demanded that separate counselling sessions should be provided when disclosing the outcome of the result. There is a need for the fertility clinic to promote privacy by ensuring that the reasons for a women's physical presence in the healthcare facility are not known by other users, as well as keeping the client's information private and away from others. The women also preferred that on-going counselling should be done and continued even after the procedure had failed. 'The National Institute For Clinical Excellence (2013) guidelines recommended that counselling should be offered to women and/or couples before, during and after investigation and treatment, irrespective of the outcome of these procedures' (NICE, 2013 p. 13). Nonetheless, it appeared that in practice, counselling focused on those pursuing the treatment, and contact with counsellors often end when treatment ends (Peters, 2003; Ying et al., 2015).

An added practical feature by this research that apply to medical practice is the description of the women to certain types of help and support that might be particularly helpful in resolving some of the challenges associated with IVF treatment. The participants expressed that if they have something similar to peer groups, they could share their stories, and then encourage each other, it would be of benefit to them. They all expressed that sometimes they needed someone in a related condition to talk to in order to ease some of the stress associated with IVF treatment. The results from this study highlighted that peer support from other women was beneficial. As this kind of support seemed to aid the women in feeling less alone, more understood, and helped to resolve the threat which childlessness posed in their lives.

The study results highlighted how participants endeavoured to keep their fertilty seeking behaviour concealed due to religious and cultural implications of being infertile and seeking assisted reproductive treatment, the social stigma attached to it, and fear of being the target of gossip.

They also described how for fear of feeling left out, ostracised from their peers and community, and social marginalisation, seem to contribute to the challenges women face in coming to terms with unsuccessful IVF treatment. Many people are less aware of it and have less ability to accept such treatments because of several misconceptions and beliefs. Several people in the Ghanaian community does not believe in test-tube babies. They think that children born out of IVF treatment are not healthy. There is a need to intensify education on IVF treatment to dispel this misconception.

In the Ghanaian society, individuals who have problems conceiving a child has been generally attributed to receiving punishment from the supreme being as result of their sins of the past, and the result of witchcraft have been cited (Donkor & Sandall, 2009). Individuals who are infertile are generally stigmatised and detested in their communities and often referred to as '*obonin*' in the Akan language meaning 'barren' and may not obtain their fair share of possessions because of their inability to bear a child (Alhassan et al., 2014; Donkor & Sandall, 2007; Fledderjohann, 2012; Naab et al., 2013).

Initiatives such as National Fertility Awareness Week, International Day of Infertility, religious and peer support groups, Walking Egg Project, to raise public awareness and increase understanding about infertility and IVF treatment. This initiative will go a long way to dissipate the myths and misconceptions associated with infertility and IVF treatment. Encouraging healthcare professionals and women experiencing fertility problems to get involved in such initiatives may help to start to change the societal perception, which contributes to the stigma of childlessness and assisted reproductive technologies in our culture currently.

Unlike their counterparts in Western advanced nations where support by way of educational emotional and social is readily available, individuals living with infertility in Africa have had to endure this distressing problem with it attendant's agony and tension with little or no support.

In a healthy pro-natalist society like Ghana where childbearing and parenthood is desirable, such support groups are missing. This situation can exacerbate the agony and stigmatising situation of people facing infertility problems in Ghana.

In fact, it is only recently that a new non-governmental faith-based non-denominational support agency by name Association of Childless Couples of Ghana (ACCOG) has been formed and supporting childless couples. The aims among others have not only been to support the couple through IVF treatments but also to educate, minimise negative cultural and psychosocial burden/ consequences such as stigma, mood disorders and suicide prevention.

Implications of the Study for Public Policy

In Ghana, ART services remain mostly inaccessible, and the most neglected and marginalised public health issue regardless of the high prevalence of infertility. The study revealed that the needs of women seeking fertility care is not being met as expected. The impact of racial and national inequality, infertility and assisted reproductive technology outcomes, must remain a priority for policymakers and the nursing profession to make positive changes. Providing infertility care in developing countries can only be successful and sustained if we can diminish the myth concerning unwanted childlessness

The findings of this study may affect public policy by expanding nursing knowledge in helping to ensure and advocate for equal access to quality health care to eliminate disparities in IVF coverage nationwide. The women's voices are fundamental when the issue of infertility and its treatment must be discussed with policymakers and healthcare providers. To date there is no specific national guidelines and regulation in Ghana to control the practice of ARTs

Need for public education and raising awareness on reproductive health issues

Firstly, there is an urgent need for public education on reproductive health and raising awareness of health care providers and politicians on the importance of childlessness and challenges associated with infertility treatment. As a matter of urgency it is important to make effort aimed at changing discriminatory attitudes and sociocultural practices against childlessness by involving the media, interested civil organisations and relevant authorities to reach this goal. Support of media and patients' networks is needed.

This study may also inform policymakers, stakeholders and administrators to be aware of the unmet wishes of individuals who fail fertility interventions Ghana and fully comprehend meaning in living with this dilemma. Opportunities for fertility awareness education of patients and the public, for example, in schools and colleges and through general media should be taken whenever possible by nurses and other professionals.

Assisted reproductive technology (ART) should be added to existing shared sociocultural suitable infertility programmes. Operationalisation of reachable ART services should be included into exiting family planning and reproductive health activities of governmental agencies. It is time that policymakers and healthcare staff give the needed attention to infertility management and the need for patients who are infertile and seeking IVF treatment.

Need for accessible IVF care in Ghana

Secondly, a good number of Ghanaian populace is being denied access to ART services mainly due to high costs of the procedure and mostly limited to private centres. Information gathered from the women’s narratives, indicate that the participants had concerns on the huge financial burden involved in one round of IVF treatment and suggested both government as well as non-governmental organisations should come in and help. Infertility and IVF treatment should be included into national agenda on education on reproductive health. In the developed countries IVF treatment is provided by the public health system where sophisticated and regulations and laws exist as well as biomedical practice guidelines.

It is important to introduce simple, affordable but efficacious means of treatment so that the average Ghanaian women can access them. The participants described one cycle of IVF treatment as costly, making accessibility impossible. An added focus preventive education will go a long way to minimise the incidence of infertility.

It is also envisaged that the medical and pharmaceutical industry will also make relevant contributions such as providing low-priced medication, manufacturing of necessary ultrasound and laboratory equipment at a lower price. The Ghanaian government may also assist the private civil groups who are the main providers currently in region by waiving taxes on drugs and other consumables, so that the average Ghanaian woman can afford.

The study may also open opportunities for private stakeholders in the related field recognise the magnitude of the problems face by women seeking IVF care and probably may come in to help this venerable population.

Organisation of Training Courses

Training courses need to be arranged regularly for the medical staff, nurses, midwives, counsellors and the laboratory personnel. Ghanaian Universities which offer postgraduate programmes in reproductive health, obstetrics and gynaecology need to consider implementing a speciality training in this area to improve access to fertility care.

The training of healthcare staff working with women and couples in fertility clinic settings should include considerations of the socio-cultural context of infertility and not only focus on the medical and technical, domains of treatment. This training is currently lacking, which means patients are sometimes isolated and left unsupported to deal with their problems. Educating healthcare professionals in this way may offer valuable expertise and knowledge in this field.

This study may occasion the chances of inclusion of courses or modules for continuing professional education which currently lacking. The current Ghanaian nursing curricula does not include the care of patients and families who have failed IVF treatment despite the escalation in the use of IVF treatment. Modules of infertility and specifically ART treatments should be included in all nursing and midwifery curricula and other training opportunities, to improve the knowledge of practitioners.

Strengths and Limitations of the Study

Strengths

This study has contributed to the better understanding of the lived experiences of unsuccessful IVF treatment in the Ghanaian context. I believe, the study aim, which was to explore women's experiences of unsuccessful IVF treatment, has been met through the study design and implementation. This study purpose is to fill this gap in the literature and contribute to the theoretical understanding of the process involved in IVF treatment among women undergoing assisted reproductive treatment.

The strength of this study also lies in how it revealed the vulnerability faced by the women during treatment and following unsuccessful treatment. The communication aspect especially, the nurses, counsellor and the doctors from the clinic is considered a big part of the vulnerability.

By using the philosophy of Heidegger's phenomenology has engendered an exclusive and distinctive viewpoint to women's experiences of unsuccessful IVF treatment in Ghana. Concentrating on women's unsuccessful IVF procedure using Heidegger's three modes of *being* fits well for this study as the reality of the women's lived experience can be more easily and completely understood. Applying Heidegger's hermeneutic phenomenological approach also enabled interpretations to be made, thereby increasing knowledge of IVF treatment journey within the Ghanaian context. Given the nature of the research question, the philosophy of Heidegger's phenomenology allowed for more precise and in-depth understanding of women who have undergone IVF treatment failure.

Finally, the potential strength of this study is related to the opportunity to live the IVF treatment experience. The reality of my own experience of unsuccessful IVF treatment offered a unique view of detailed understanding of the entire occurrence of IVF treatment.

My personal experience also contributed to the interpretations and meaning making of the information generated for this study. This lived experience enabled me to consider how the knowledge, ideas and concepts that the study generated applied to clinical practice and care of the patient receiving IVF treatment in the Ghanaian context.

Study Limitations

First, this study recognises the limited number of participants and the purposeful nature of the study. However, the number of participant used in this study was enough to attain and conclusions similar to those of other researchers (McCarthy, 2008; Pedro & Faroa, 2017; Peters, 2003).

Participants in this research sought treatment from one infertility centre situated in one geographical area in Kumasi. The experiences of those women who did not seek IVF treatment for whatever reasons were not represented. The extent to which the findings reflect and resonate with other women who are infertile attending different fertility hospital remains to be determined.

Another limitation is my exclusion of male partners, including both male and female may be desirable and add extra depth to the data in future studies as infertility brings distress to the couple. This is also in agreeing with the philosophy of phenomenology that reinforces this study as regard inviting participants on the basis of their lived experience of the phenomenon being studied and could accurately inform it by telling their own story.

Contribution of the Study to Knowledge

This study contributes significantly to the extant literature by providing valuable insight into how Ghanaian women lived experiences of IVF failure and their perceptions of the treatment. This study is the first to discuss more evidence-based nursing research by applying Heidegger’s three modes of *being* primarily in the disenfranchised and under-represented populations. The findings present a theoretical understanding and knowhow of the medicalisation of reproduction at a societal level. The study has also given a voice to how ARTs are currently experienced in the Ghanaian context.

Through the Heideggerian hermeneutic approach, the IVF users' orientation to the task of their experience were illustrated using grief model to negotiate relationships and adopt measures to cope following IVF treatment failure. This study is the first to use Heidegger's three modes of *being* to discuss the concept of the DPM of coping to grief reaction concerning lived experience of IVF failure.

The study also builds on an understanding of the social impact on infertility and its treatments. Undergoing IVF treatments challenge some women's taken for granted cultural beliefs about illness and health. The women made every effort to *comport* themselves in the IVF treatment journey regardless of the difficulties and stressful nature of this journey all in the name of belonging into the mother world and attain status and identity in the social world.

The study provides evidence of the difficulty's women face in accessing ART services in Ghana. In particular, the physical, emotional and the costly nature of the treatment, future treatment cycles is unexpected to them and clearly limits their decision-making and planning. Recognising the challenges that exist for women accessing ARTs fertility care is imperative so that ways in which these can be overcome can be encouraged and those who need help are not prevented from receiving it.

I believe that the study provides comprehension into the involvement of their male partners in assistant and *authentically* cared for them. The women described their husbands as *being-there* for them throughout the IVF journey. They could not have survived these stressful and tedious experience had it not been for the support provided by their husbands.

Suggestions for Future Studies

Using the philosophy of Heidegger's hermeneutic phenomenology in this study indicated that the interpretive meanings will probable develop and grow. Integrating quality, evidence-based research into clinical decisions and practice renders the nurse professionally responsible to their client. Currently, there are no preliminary records present within the nursing literature concerning failed IVF treatment in Ghanaian women. This dilemma is poorly understood, and as a result, this highlights the necessity for extensive research. The more available literature on women's experiences during IVF treatment may enlighten healthcare workers concerning their attitudes to consumers and promote frequent reviews of standards and accountability of these services. As IVF treatment commonly fails to result in pregnancy, nurses should be equipped to provide the level of support required for different treatment outcomes. As Heidegger claims, it is only through uncovering the situation in which we flee that we begin to understand and interpret the meaning of our *life-world* (Heidegger, 1996).

I recommend that IVF caregivers investigate not only the women, but also their partners who are infertile in the IVF setting. This study can also add to the evidence for nursing practice.

This study offers opportunities for further research to explore differences in support perceptions and requirements by both successful and unsuccessful IVF users, as well as comparing reactions of IVF staff to those who have varying treatment outcomes. Even though some women become successful in their IVF treatment, little research effort focus on their rich experiences and as the motherless in my study decided to pursue IVF treatment until they become successful. I think investigating such women deserves attention as this will go a long way to enrich our knowledge and also add to the literature.

Conclusions

The study applied the philosophy of Heidegger to Ghanaian women's experiences of failed IVF procedure. The study revealed that the women described distress and feelings of loss when facing the risk for future infertility. The women seem very susceptible as they frequently expressed their dissatisfaction with the inadequate or no education received on their deep seated concern for possible conception of a child and childbirth in the near future.

From the participants' phenomenological conversations, it is evident that ART procedures decreases woman's overall gratification which requires that women in an IVF program need ongoing emotional and instrumental support through all the stages of the IVF treatment. This evidence supports the conclusion that there is a substantial unmet need for IVF services in Ghana. This lived experienced of IVF treatment offered me an opportunity to give 'voice' to those Ghanaian women who are motherless. The result will provide an appreciative in-depth information and awareness of *being-in-the-world* of typical Ghanaian knowhow as far as infertility and IVF treatment is concerned. The findings of my study sustenance a more wholistic and authentic method of providing care women and couples pursuing IVF procedure. The study highlights the need for patient-centred care and fertility education.

Final Journal Entry Before Submission – Thursday, 25th July 2019.

I have found undertaking this PhD journey very exciting, and intensely rewarding but occasionally contending with other duties of mine in terms of intellectual attention challenging and all-consuming as it consistently competed with other commitments. I must say that the journey has been a difficult thing I have ever face yet exciting one filled with renewed faith and a positive outlook on life, but in all, I often found the strength to smile. The research undertaking has proven beyond reasonable doubt that women who without no fault of theirs find themselves in this predicament need a lot of nerve audacity and resilience in their pursuit of becoming a proud mother. The phenomenological story of the women's experiences of unsuccessful IVF treatment is to understand what it means to be motherless and experiencing unsuccessful IVF treatment.

Rather puzzlingly, this situation of *being* infertile and experiencing repeated unsuccessful IVF treatment has turned to be gratifying life experience. I must admit I am one of the lucky ones who finally became a mother after struggling with fertility problems. I got the chance to try IVF treatment. I want to see all women and couples in need have the same opportunities and experience what it is like to *be-in-the-mother-world*.

My personal *Dasein* is very much appreciated. The opportunity this study has accorded me is that my negative experience has transformed me into responsible resilient individual providing a valuable example to society to face any challenging experience.

I am optimistic that knowledge acquired from my phenomenological journey may allow nurses an opportunity to provide better wholistic and *authentic* care for women seeking IVF treatment. The nursing profession should be the voice to spearhead education of IVF patients to ensure total comprehensive of the treatment ramifications of their choices and counselling support for their emotional needs during the process. They also must ascertain whether or not the IVF users can cope healthily with the stressful life event and consequences of IVF treatment.

Lessons Learned From the Phenomenological Journey

Heidegger’s Hermeneutic philosophy guided this study to explicate the meaning women with fertility problems ascribe to failed IVF treatment. The overall process of carrying out this research has been illuminating and rewarding, but has challenged me as a nurse, education professional as well as my lived experiences of unsuccessful IVF treatment. Through it all I have developed a fulfilment from an often philosophically challenging qualitative research study. Conducting this hermeneutic phenomenological has helped me gained a deeper understanding of women experiences of unsuccessful IVF treatment and Heidegger’s philosophy.

At times the research has been daunting, in particular when I consider the richness of the information gathered, which is based in the honesty and enthusiasm from the women.

The methodology was often something I had to grapple with. Actualising the philosophy of Heidegger was a big challenging experience and often, I was challenged by my supervisor to read and understand Heidegger’s concept before I could proceed to the next step of the study. This also helped to gain in-depth knowledge and understanding of the theoretical underpinning guiding this study. However I have also learned that utilising the philosophy of Heidegger was useful and valuable and has provided adequate motivation for future research in identifying strategies to enhance the health workers efforts in improving IVF care.

The phenomenological conversation as, well as the interpretive process, was also a big thought-provoking exercise in the phenomenological journey. I was also concerned with the first phenomenological conversation that the women might not engage. However, this process became easier and really exciting by the openness and willingness of the participants as the conversation progressed. The interpretive process did however test my skills as a researcher and shed some light on myself as a healthcare professional and with my personal experience of IVF treatment. The overly sensitive nature of infertility makes it a difficult topic to discuss as infertility and IVF treatment is shrouded in secrecy due to the stigma attached. As a result, identifying the appropriate women for the study was a daunting task and especially during the feedback sessions it was very difficult for me to contact the women but with perseverance and self-determination, I was able to overcome this challenge. Then again there were instances when the sharing of ideas and experiences became emotionally driven. Through reflexivity, I become aware of my contribution to the construction of *meaning* women assigned to their lived experiences throughout the research process. This helped me determine how I felt about what I have learned regarding the *meanings* that participants have shared with me. Reflexivity allowed me to be critical about what I heard, wrote and interpreted.

I feel better equipped for future study in this field.

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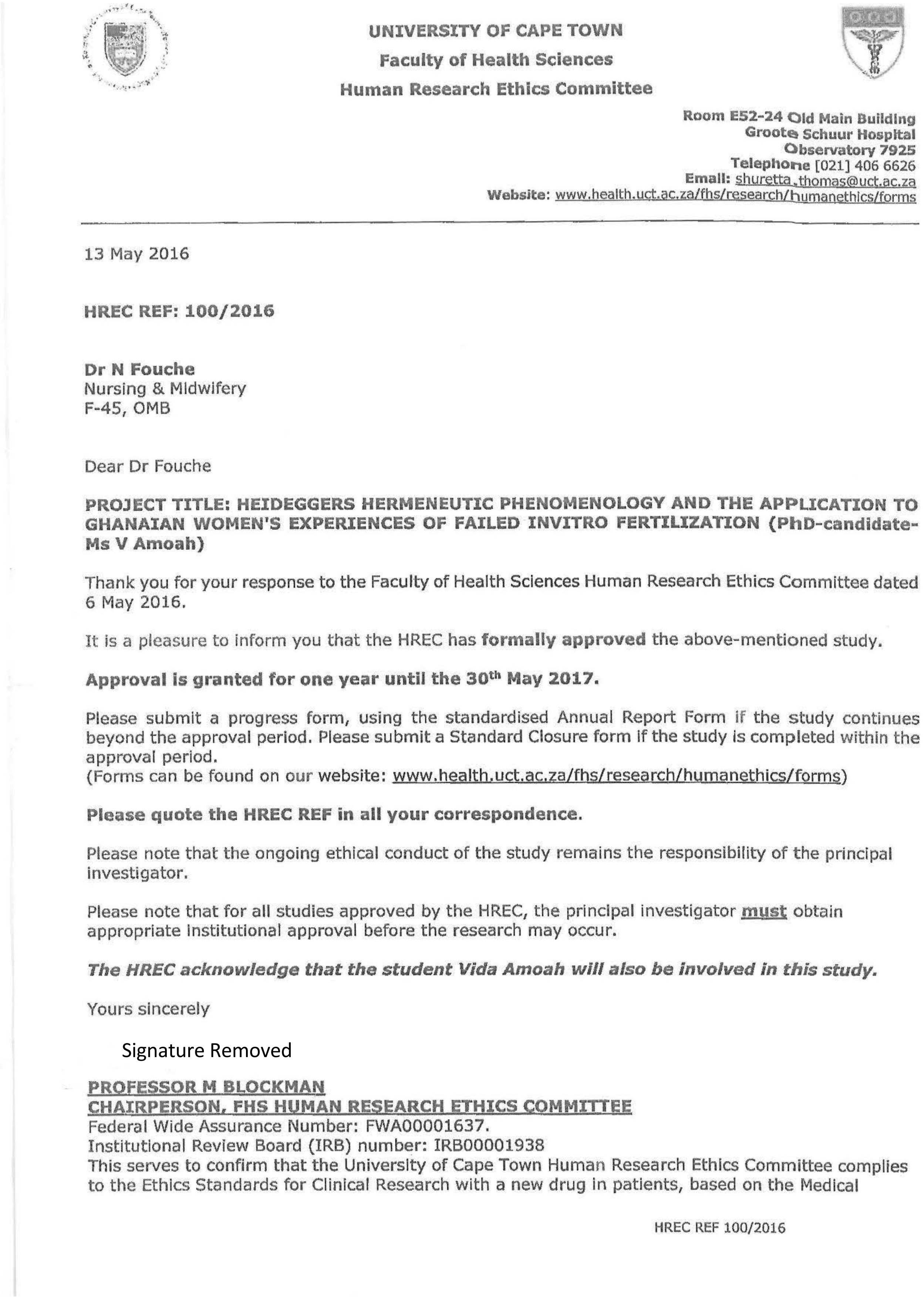
APPENDICES

APPENDIX A: Ethical Clearance from Human Research Ethics Committee (HREC) Faculty of Health Sciences -UCT



UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee

Room E52-24 Old Main Building
Groote Schuur Hospital
Observatory 7925
Telephone [021] 406 6626
Email: shuretta.thomas@uct.ac.za
Website: www.health.uct.ac.za/fhs/research/humanethics/forms

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13 May 2016

HREC REF: 100/2016

Dr N Fouche
Nursing & Midwifery
F-45, OMB

Dear Dr Fouche

PROJECT TITLE: HEIDEGGERS HERMENEUTIC PHENOMENOLOGY AND THE APPLICATION TO GHANAIAN WOMEN'S EXPERIENCES OF FAILED INVITRO FERTILIZATION (PhD-candidate- Ms V Amoah)

Thank you for your response to the Faculty of Health Sciences Human Research Ethics Committee dated 6 May 2016.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year until the 30th May 2017.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.
(Forms can be found on our website: www.health.uct.ac.za/fhs/research/humanethics/forms)

Please quote the HREC REF in all your correspondence.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval before the research may occur.

The HREC acknowledge that the student Vida Amoah will also be involved in this study.

Yours sincerely

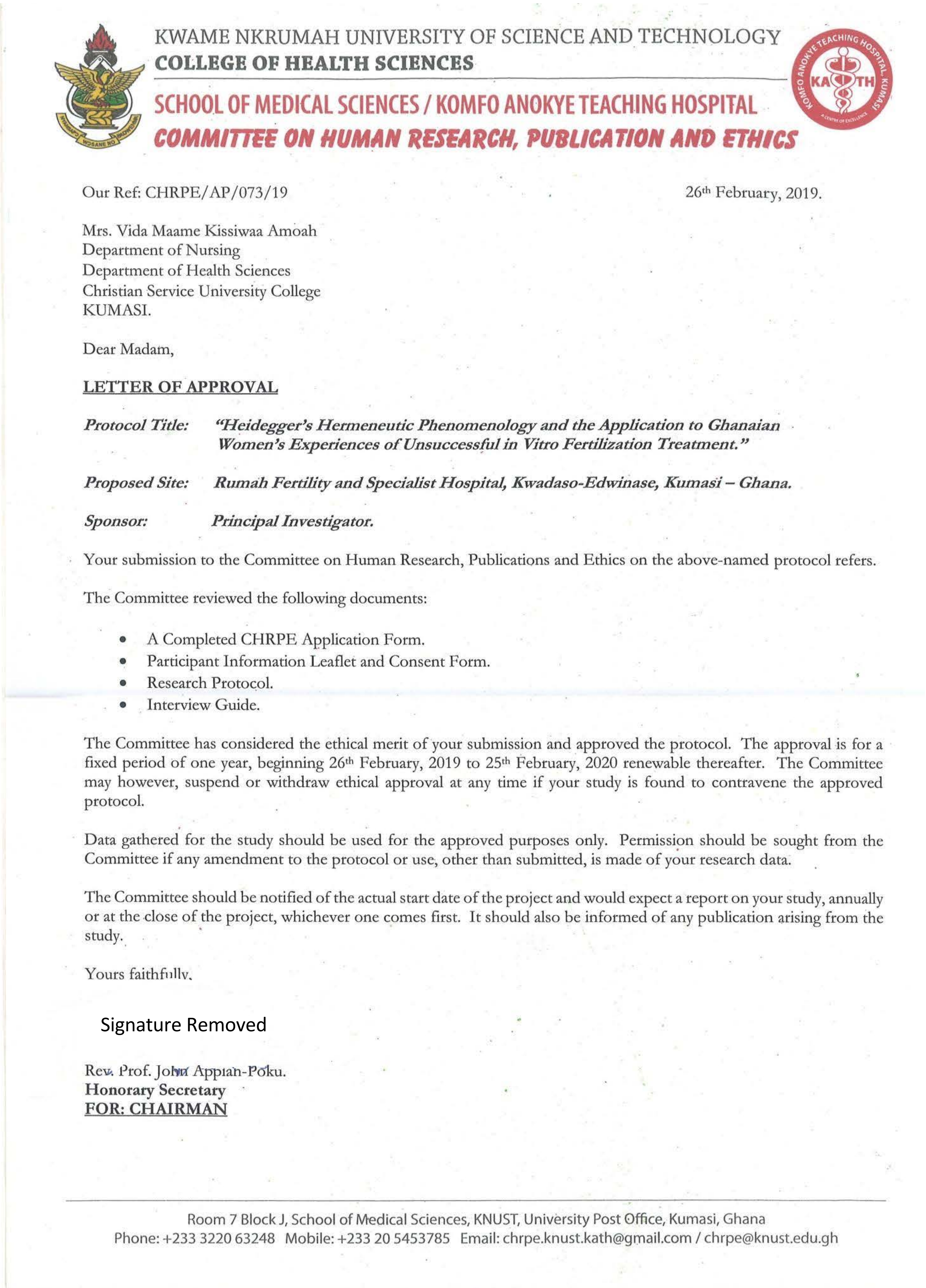
Signature Removed

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE
Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938
This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical

Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP), South African Good Clinical Practice Guidelines (DoH 2006), based on the Association of the British Pharmaceutical Industry Guidelines (ABPI),and Declaration of Helsinki (2013) guidelines.

The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

APPENDIX B: Ethical Approval from KNUST Committee on Human Research, Publication and 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/073/19 26th February, 2019.

Mrs. Vida Maame Kissiwaa Amoah
Department of Nursing
Department of Health Sciences
Christian Service University College
KUMASI.

Dear Madam,

LETTER OF APPROVAL

Protocol Title: *"Heidegger's Hermeneutic Phenomenology and the Application to Ghanaian Women's Experiences of Unsuccessful in Vitro Fertilization Treatment."*

Proposed Site: *Rumah Fertility and Specialist Hospital, Kwadaso-Edwinase, Kumasi – Ghana.*

Sponsor: *Principal Investigator.*

Your submission to the Committee on Human Research, Publications and Ethics on the above-named protocol refers.

The Committee reviewed the following documents:

- 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 26th February, 2019 to 25th February, 2020 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.

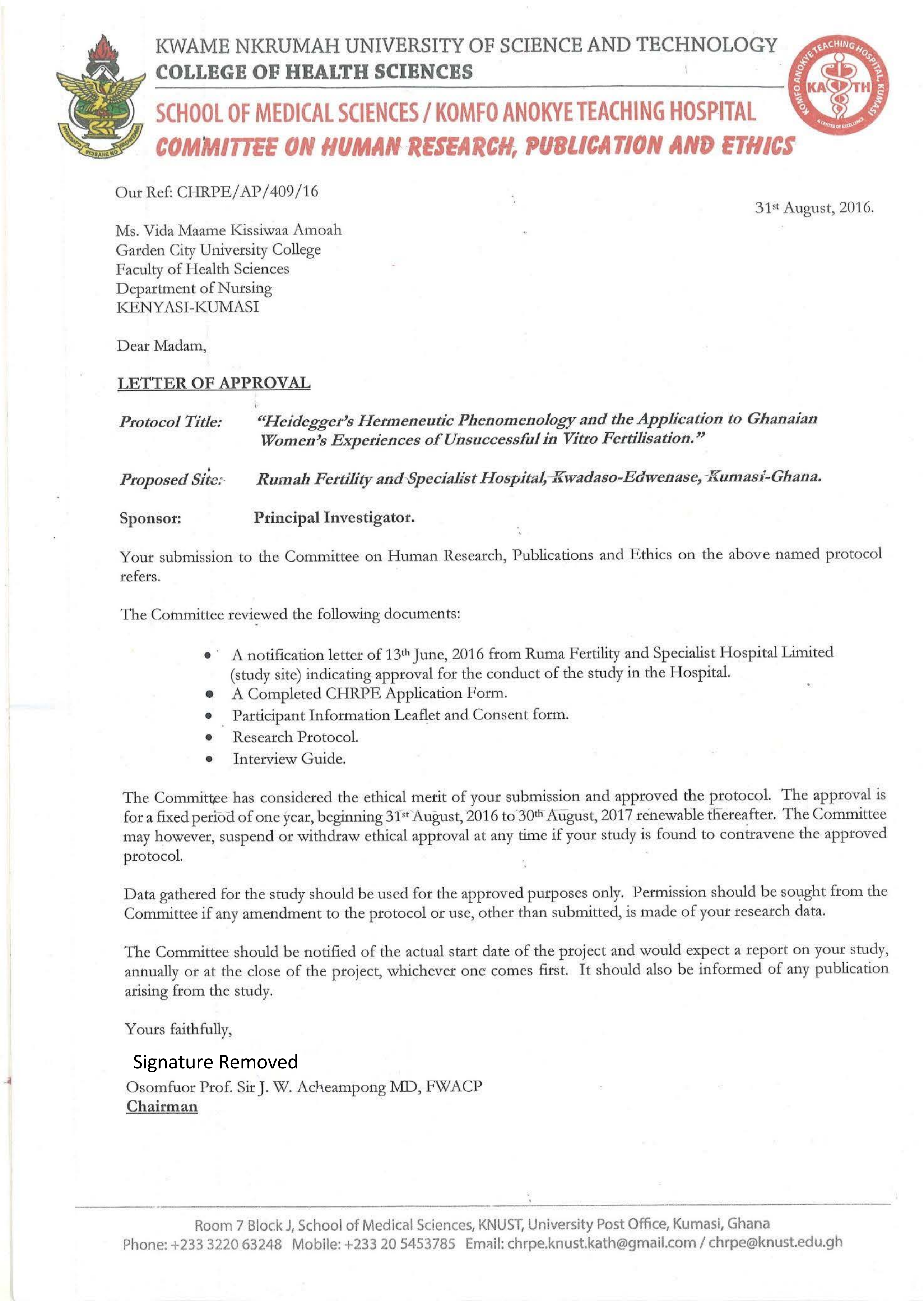
Yours faithfully,

Signature Removed

Rev. Prof. John Appiah-Poku.
Honorary Secretary
FOR: CHAIRMAN

Room 7 Block J, School of Medical Sciences, KNUST, University Post Office, Kumasi, Ghana
Phone: +233 3220 63248 Mobile: +233 20 5453785 Email: chrpe.knust.kath@gmail.com / chrpe@knust.edu.gh

APPENDIX C: Ethical Clearance from Committee on Human Research, Publication and Ethics (CHRPE) KNUST, Kumasi



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/409/16

31st August, 2016.

Ms. Vida Maame Kissiwaa Amoah
Garden City University College
Faculty of Health Sciences
Department of Nursing
KENYASI-KUMASI

Dear Madam,

LETTER OF APPROVAL

Protocol Title: ***"Heidegger's Hermeneutic Phenomenology and the Application to Ghanaian Women's Experiences of Unsuccessful in Vitro Fertilisation."***

Proposed Site: ***Rumah Fertility and Specialist Hospital, Kwadaso-Edwenase, Kumasi-Ghana.***

Sponsor: **Principal Investigator.**

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 of 13th June, 2016 from Ruma Fertility and Specialist Hospital Limited (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 31st August, 2016 to 30th August, 2017 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,

Signature Removed

Osomfuor Prof. Sir J. W. Acheampong MD, FWACP
Chairman

Room 7 Block J, School of Medical Sciences, KNUST, University Post Office, Kumasi, Ghana
Phone: +233 3220 63248 Mobile: +233 20 5453785 Email: chrpe.knust.kath@gmail.com / chrpe@knust.edu.gh

APPENDIX D: Ethical Clarification from Ruma Fertility and Specialist Hospital-Kumasi, Ghana

RUMA
...Now Every One Can Have a Baby

RUMA FERTILITY & SPECIALIST HOSPITAL LIMITED
P. O. BOX YB 254 ASUOYEBOAH KUMASI CONTACTS: 0208 160 544, 0244 637 944

13 th June, 2016

THE CHAIRPERSON,

FHS HUMAN RESEARCH ETHICS COMMITTEE

UNIVERSITY OF CAPE TOWN

FACULTY OF HEALTH SCIENCES

Dear Sir,

APPROVAL FOR USE OF RUMA FERTILITY AND SPECIALIST HOSPITAL LTD

This is to affirm that **Mrs.VIDA AMOAH** has been given approval by the management of **Ruma Fertility and Specialist Hospital Ltd, Kumasi, Ghana** to use our facility for her doctoral research on the topic **" Ghanaian Women's experiences of unsuccessful in vitro fertilisation (IVF) treatment."**

Yours faithfully,

Signature Removed

Dr Rudolph Kantum Adageba (MD, FWACS, CERT-ART)

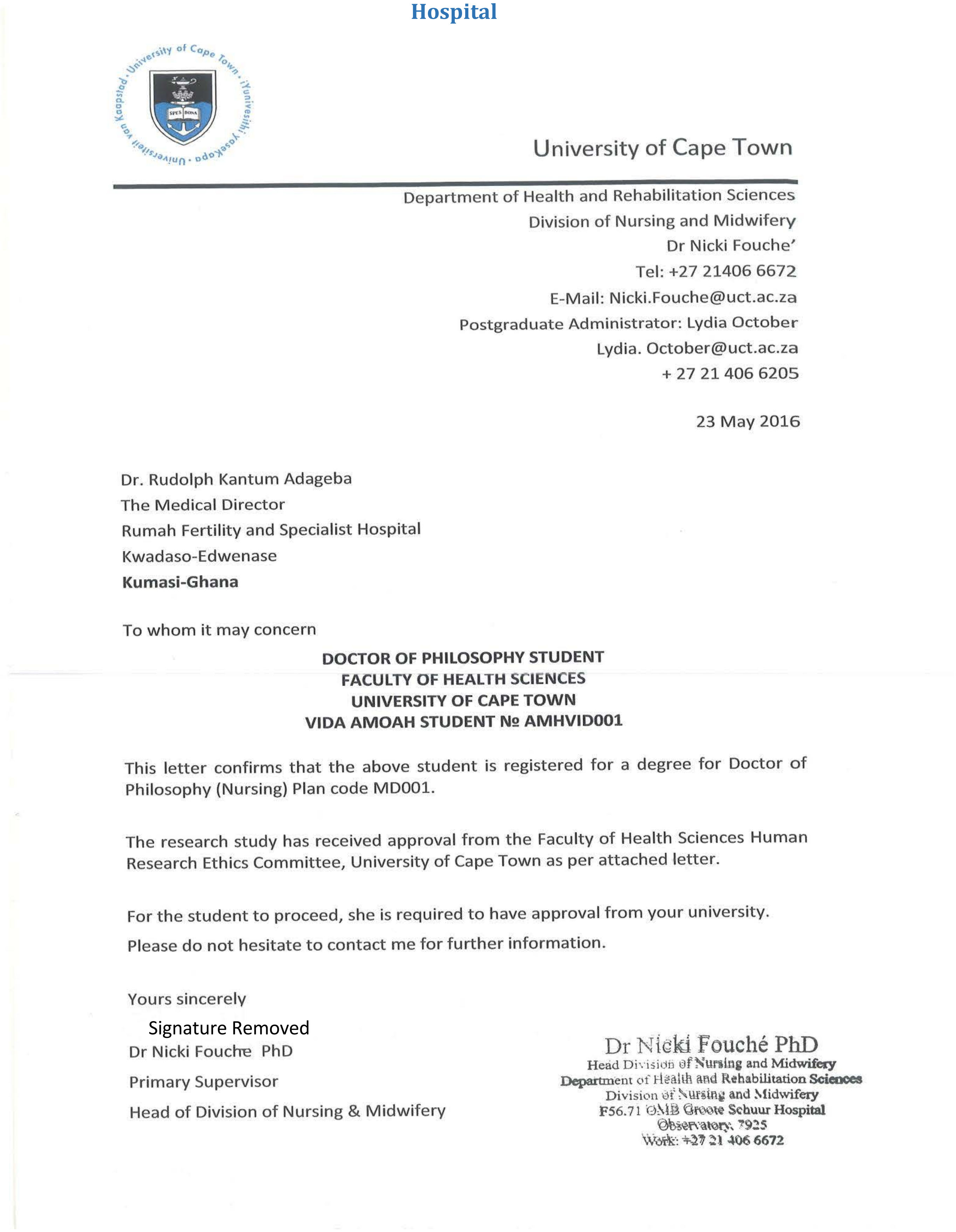
(CEO-RUMA FERTILITY & SPECIALIST HOSPITAL LT)

RUMA FERTILITY & SPECIALIST HOSP.
KWADASO--OHWIMASI
H/Nº. PLOT 6 BLOCK 12
KUMASI

Bankers:
Fidelity Bank

Email:rumaivf@gmail.com
Website:www.rumaivf.com

APPENDIX E: Introductory letter to CEO of Ruma Fertility and Specialist Hospital



University of Cape Town

Department of Health and Rehabilitation Sciences
Division of Nursing and Midwifery
Dr Nicki Fouche'
Tel: +27 21406 6672
E-Mail: Nicki.Fouche@uct.ac.za
Postgraduate Administrator: Lydia October
Lydia. October@uct.ac.za
+ 27 21 406 6205

23 May 2016

Dr. Rudolph Kantum Adageba
The Medical Director
Rumah Fertility and Specialist Hospital
Kwadaso-Edwenase
Kumasi-Ghana

To whom it may concern

DOCTOR OF PHILOSOPHY STUDENT
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF CAPE TOWN
VIDA AMOAH STUDENT № AMHVID001

This letter confirms that the above student is registered for a degree for Doctor of Philosophy (Nursing) Plan code MD001.

The research study has received approval from the Faculty of Health Sciences Human Research Ethics Committee, University of Cape Town as per attached letter.

For the student to proceed, she is required to have approval from your university.

Please do not hesitate to contact me for further information.

Yours sincerely

Signature Removed

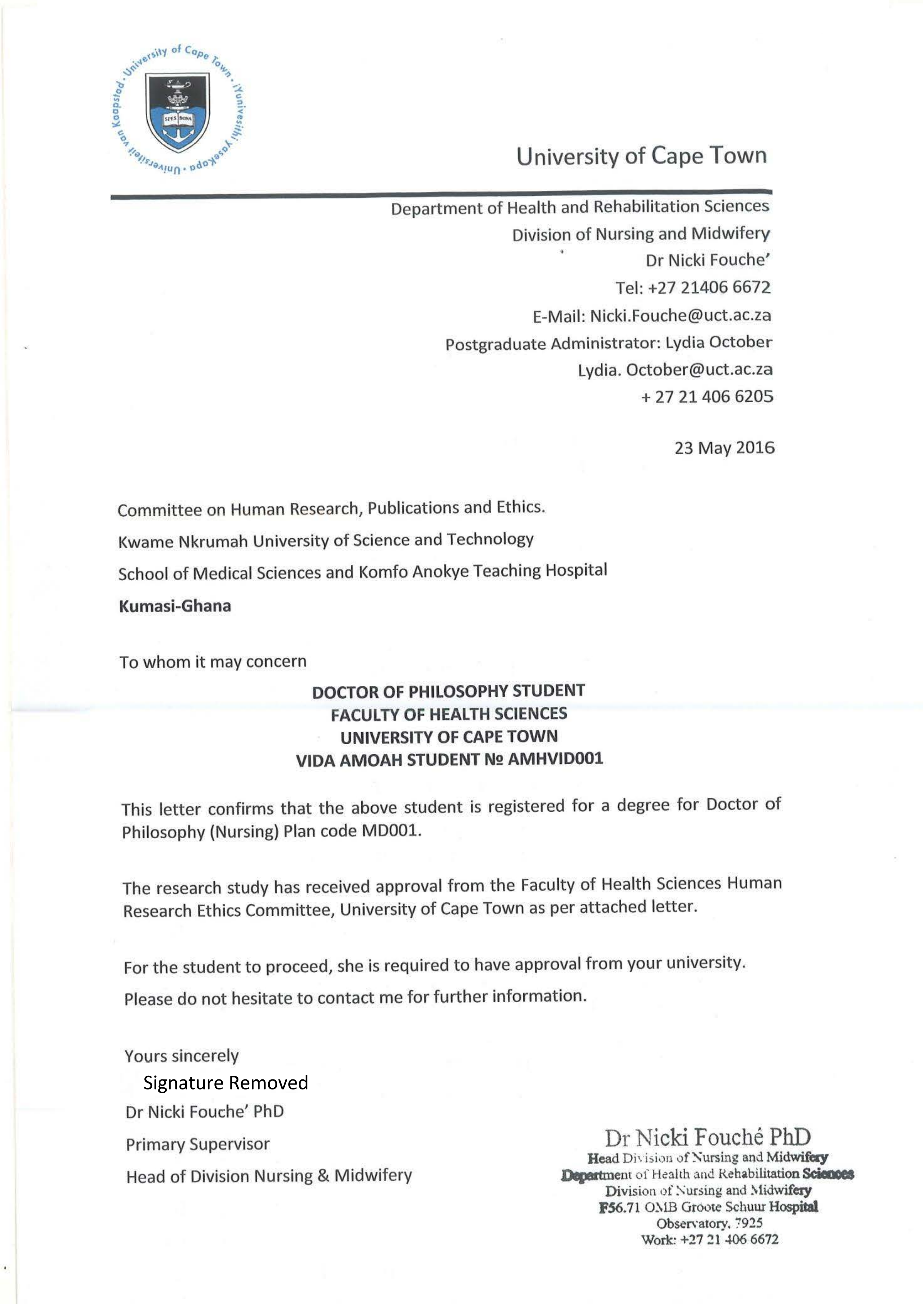
Dr Nicki Fouche PhD

Primary Supervisor

Head of Division of Nursing & Midwifery

Dr Nicki Fouché PhD
Head Division of Nursing and Midwifery
Department of Health and Rehabilitation Sciences
Division of Nursing and Midwifery
F56.71 OMB Groote Schuur Hospital
Observatory, 7925
Work: +27 21 406 6672

APPENDIX F: Introductory Letter to CHRPE



University of Cape Town

Department of Health and Rehabilitation Sciences
Division of Nursing and Midwifery
Dr Nicki Fouche'
Tel: +27 21406 6672
E-Mail: Nicki.Fouche@uct.ac.za
Postgraduate Administrator: Lydia October
Lydia. October@uct.ac.za
+ 27 21 406 6205

23 May 2016

Committee on Human Research, Publications and Ethics.
Kwame Nkrumah University of Science and Technology
School of Medical Sciences and Komfo Anokye Teaching Hospital
Kumasi-Ghana

To whom it may concern

DOCTOR OF PHILOSOPHY STUDENT
FACULTY OF HEALTH SCIENCES
UNIVERSITY OF CAPE TOWN
VIDA AMOAH STUDENT № AMHVID001

This letter confirms that the above student is registered for a degree for Doctor of Philosophy (Nursing) Plan code MD001.

The research study has received approval from the Faculty of Health Sciences Human Research Ethics Committee, University of Cape Town as per attached letter.

For the student to proceed, she is required to have approval from your university.

Please do not hesitate to contact me for further information.

Yours sincerely
Signature Removed
Dr Nicki Fouche' PhD
Primary Supervisor
Head of Division Nursing & Midwifery

Dr Nicki Fouché PhD
Head Division of Nursing and Midwifery
Department of Health and Rehabilitation Sciences
Division of Nursing and Midwifery
F56.71 OMB Groote Schuur Hospital
Observatory, 7925
Work: +27 21 406 6672

APPENDIX G: Invitation Letter

Department of Health and Rehabilitation Science

University of Cape Town

This document will be translated into local Akan (Twi) language for participants who cannot communicate comfortably in English language

Date:

Hello Prospective participant,

I am grateful you for your expressing desire to participate in this study. You are cordially invited to participate in this study to share your IVF treatment experiences. By partaking and sharing your experiences, the study may benefit future women. Please I have attached the information sheet which describe the purpose of the study and what your involvement will be, including contact so the researcher can explain in detail as you require. Please take your time and carefully read the Information sheet so you can take a decision. You can feel free to ask any questions that bothers you.

I grateful and expect to hear from you soon.

Thank you.

Kind Regards

For further clarification, please you can contact Vida Amoah at the telephone numbers below: 0208161712 or 0322096383.

APPENDIX H: Participant's Information Sheet

Department of Health and Rehabilitation Science

University of Cape Town

Division of Nursing and Midwifery

Study Title: Heidegger's Hermeneutic Phenomenology and the application to Ghanaian Women's Experiences of unsuccessful in vitro fertilisation

This document will be translated into local Akan (Twi) language for participants who cannot communicate comfortably in English language

To whom it may concern,

Dear Prospective Participants

I am Vida Amoah, I am currently enrolled with University of Cape Town, South Africa studying to attain a Doctorate in Nursing. I have been a nurse at KNUST Hospital for ten years; currently I am a lecturer at Garden City University College (GCUC), Kenyase-Kumasi.

Thank you for agreeing to participate in this research to share your experiences concerning in vitro fertilisation treatment.

WHAT IS THE PURPOSE OF THIS RESEARCH PROJECT?

The study purpose is to describe and interpret the experience of IVF from the perspective of women living with infertility challenges in order to gain a deeper knowledge of how women feel about the experiences of unsuccessful IVF treatment. The researcher has also undergone unsuccessful IVF treatments and so she has a peculiar interest in this area. However, the researcher understands that many issues need to be overcome not only during the procedure, but even after the treatment has been completed. The situation is said to be more thought-provoking for women to cope if they have tried to achieve pregnancy using the current advanced reproductive technologies such IVF treatment but the procedure was not successful. Your journey could be lonely when there is no one to understand your problems and concerns, your coping experiences will be unknown. Hence, this study is conducted with the purpose of beholden your lived experiences of IVF treatment. It is hoped that your contribution may increase the knowledge base relating to IVF experience which may also provide a possibility for the development of a self or couple care model which might be useful to address the challenges that this group of potential parents undergo throughout the process of IVF.

WHY HAS THE PARTICIPANT BEEN ASKED TO TAKE PART?

You have been asked to partake in this research because your experience of infertility and IVF treatment may offer valued information and insight for the purpose of the study. To be eligible for this study you would have had at least one IVF treatment cycle which was not successful. You will also need to be fluent in written and or verbal in English and local Akan (Twi) language. Your participation will contribute immensely to knowledge concerning your IVF experiences and its influence on your life. Findings from this research may benefit other women who experience IVF treatment failure and further may improve the quality and wholistic healthcare to women who are infertile.

WHAT WILL PARTICIPATION IN A CONVERSATION INVOLVE?

By agreeing to be a participant for the study then you will be asked to share your stories concerning IVF treatment in three phenomenological conversations. The conversation will take approximately 60 to 120 minutes in length which will be undertaken by the researcher at your own convenient time and place of your choice. You are also free to signal your need for a break during the conversation. The researcher will also need to audiotape each conversation during each visit to assist the researcher to analyse the information and during the write up. When the first conversation has been transliterated, the researcher will also set an appointment for a follow-up session. A second phenomenological conversation will be conducted after the feedback session has been evaluated which will then be followed with another feedback session. You will also be informed should there be a need for additional phenomenological conversations as the study progresses. Once your conversations have been transcribed the phenomenological text will be sent to you to confirm if the content is accurate. The information from the conversation will only be used for the intended purpose of this research. Then again you can ask any questions that bothers you concerning the study.

WHAT WILL BE THE RISKS INVOLVED?

The researcher envisaged that there will be no risks when you take part in this research. However, there may be discomfort and emotional distress associated with unravelling and sharing your experience as there is a potential that the conversation may trigger painful previous experiences or concerns which you may become upset during or after the phenomenological conversation and feedback sessions. If any difficulties are found, you will be offered access to appropriate referral for counselling and debriefing sections if required.

WHAT BENEFITS, IF ANY, WILL THERE BE FOR THOSE TAKING PART IN THE STUDY?

There may or may not be instant benefit(s) but by taking part in the study then you will have the opportunity to share your stories concerning the challenges associated with IVF treatment experience you will also contribute to knowledge on experience of IVF. You will also have had chance to improve infertility care for women just like yourself in the future. Participating in this study and going through this process, you would have the benefit of being supported by gaining an insightful knowledge into what would have helped you to progress successfully along this encounter.

VOLUNTARY PARTICIPATION

Your participation in this study is not compulsory but by your own volition. During the conversation you may also decide to answer only questions with which you feel comfortable. You the right to withdraw from the study at any time without any repercussions or any need to provide an explanation. In case you decide to withdrawn from the study then please you can inform the researcher in writing or via email at (maamek74@yahoo.com) so that any information provided for this study will be removed from the record and destroyed.

You can also contact “The UCT FHS Human Research Ethics Committee on 021 406 6338 in case you have any questions regarding the rights and welfare as research subjects on the study.”

CONFIDENTIALITY AND PRIVACY

Privacy and confidentiality will always be maintained as the student researcher realise that this is a sensitive and special time in your life. Your identity will always be protected and hold in confidence which will be only be known by the researcher. You will be allowed to choose a pseudonym of your choice to ensure privacy and confidentiality. You would be requested to sign a consent form prior to all conversations and feedback sessions indicating your willingness to take part in the conversation. During the write up and the interpretive process your consent will be sought before using the information and publication as well.

The researcher will ensure that all information will be kept in a safe and secure place locked with a key. The written narratives will be destroyed after the study is completed the electronic versions saved on my personal laptop computer which will be protected with a password.

COMPENSATION/TREATMENT IN THE EVENT OF INJURY

There is no compensation or insurance cover, however in the unlikely event of physical injury as a result of partaking in this study, treatment and rehabilitation services will be made available.

WHO TO CONTACT FOR FURTHER INFORMATION

If there is any questions regarding the nature of this study, you may contact the supervisor and the researcher via email or by phone.

You may contact "The UCT FHS Human Research Ethics Committee on 021 406 6338 in case you have any questions regarding the rights and welfare as research subjects on the study."

Study Supervisor: Dr. Nicki Fouché	**Researcher**: Vida Amoah
Faculty of Health & Rehabilitation Science	Garden City University College
Division of Nursing & Midwifery	
F56.71OMB Groote Schuur Hospital	Department of Nursing
Observatory 7925, Cape Town	Kenyase-Kumasi, Ghana
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APPENDIX I: Agreement for Phenomenological Conversations and Feedback Sessions

University of Cape Town

Department of Health and Rehabilitation Sciences

Division of Nursing and Midwifery

Heidegger's Hermeneutic Phenomenology and the application to Ghanaian Women's Experiences of unsuccessful in vitro fertilisation

STUDY SUPERVISOR: DR. Nicki Fouché

RESEARCHER: Vida Amoah

This document will be translated into local Akan (Twi) language for participants who cannot communicate comfortably in English language

STATEMENT OF PERSON OBTAINING INFORMED CONSENT:

I have fully explained this research to ______________________________________ and have given adequate information about the study, including that on procedures, risks and benefits, to enable the prospective participant make an informed decision to or not to participate.

DATE: ______________________ NAME: ___________________________________

STATEMENT OF PERSON GIVING CONSENT:

I have read the information on this study or have had it translated into a language I understand. I have also talked it over with Vida Amoah to my satisfaction.

I understand that I was not forced to participate in this study.

I know enough about the purpose, methods, risks and benefits of the study to decide that I want to take part in it.

I understand that I may freely stop being part of this study at any time without having to explain myself.

I have received a copy of this information leaflet and consent form to keep for myself.

I also agree to be audiotape during the conversation and feedback sessions.

I understand that I can refuse being audiotaped even in the course of the conversation and feedback sessions; the consequence of which will be an exclusion from participation.

I do agree to take part in this study.

NAME: ____

DATE: _______________ SIGNATURE/THUMB PRINT: __________________

STATEMENT OF PERSON WITNESSING CONSENT (Process for Non-Literate Participants):

I ______________________________ (Name of Witness) certify that information given to

______________________________ (Name of Participant), in the local language, is a true reflection of what I have read from the study Participant Information Leaflet, attached.

WITNESS' SIGNATURE: _____________________________________

If you have any questions or concerns regarding the nature and conduct of this study, you may contact the supervisor and the student via email or by phone.

Study Supervisor: Dr. Nicki Fouché	**Student**: Vida Amoah
Contact number: +27(0)214066672	Contact number: +233(0)208161712
E-mail: Nicki.Fouche@uct.ac.za	E-mail: maamek74@yahoo.com

You may contact "The UCT FHS Human Research Ethics Committee on 021 406 6338 in case you have any questions regarding the rights and welfare as research subjects on the study."

OR

Committee on Human Research, Publications and Ethics, Kwame Nkrumah University of Science and Technology, School of Medical Sciences & Komfo Anokye Teaching Hospital, Room 7 Anatomy Block 3, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi-Ghana. Email: chrpe.knust.kath@gmail.com

APPENDIX J: SAMPLE PROMPTS OF THE PHENOMENOLOGICAL CONVERSATIONAL GUIDE and Feedback Sessions

This document will be translated into local Akan (Twi) language for participants who cannot communicate comfortably in English language

Demographic information from each participant to be completed at the time of the first conversation. Introduction of self to the participant and the intention of the conversation is to explore the lived experiences of unsuccessful IVF treatment

All information will be kept confidential.

CONVERSATION №:

PSEUDONYM:

DATE:

AGE:

RELIGION: ETHNICITY:

EDUCATION EMPLOYMENT:

Years of being diagnosed with infertility:

Length of time receiving infertility treatment:

Number of IVF attempt

Accessibility to IVF-ET Treatments

Approximate household income

Phone Number: E-mail Address:

THE PHENOMENOLOGICAL CONVERSATION

Opening Conversation

Please describe your experiences of unsuccessful IVF treatment

- **How did it make you feel as a woman?**
- **As a mother?**

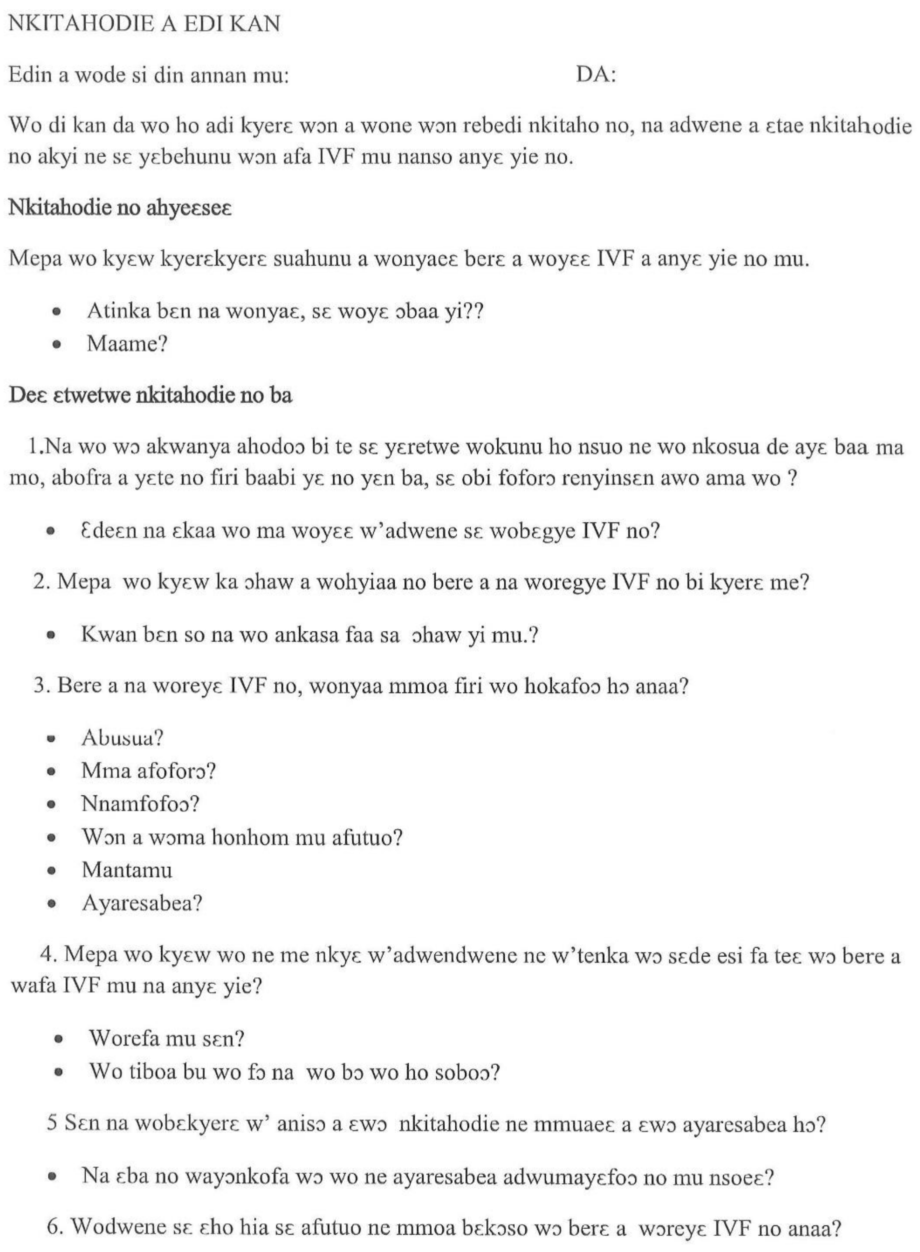
Prompts of the Phenomenological Conversation

1. **Were options such as, donor eggs, adoption, and surrogacy offered/available to you?**
    - **What influenced your decision to receive IVF Treatment?**
2. **Please tell me some of the challenges you encountered through the IVF process?**
    - **How did you personally cope with these challenges?**
3. **Did you receive any support from your partner during the IVF Process?**
    - **How was your relationship with your partner during the IVF process?**
    - **Family?**
    - **Other Children?**
    - **Friends?**
    - **What about the IVF impact on your spiritual experience?**
    - **The community?**
    - **The Clinic?**
4. **Please share your thoughts and feelings with me about what it has been like for you after unsuccessful IVF treatment**
    - **How are you coping?**
    - **How has been your experience with guilt and self-blame?**
5. **How will you describe your satisfaction with communication and information at the clinic?**
    - **What about your relationship with the health care professionals at the Fertility clinic?**
6. **Do you think there is a need for counselling and support during IVF treatment?**
    - **Please Explain**

7. **Given what you know now are there things you would want the health workers to do differently if there is a second chance**
    - **If so, what?**
8. **What do you suggest should be done in support of potential parents who are willing to undergo the process of IVF treatment?**
9. **Looking back do you regret having IVF Treatment?**
    - **What does having IVF treatment mean to you?**
10. **Please do you have any other important experience or concerns that there is yet a chance for you to share?**

Thank You

APPENDIX K: SAMPLE PROMPT OF THE AKAN VERSION OF THE PHENOMENOLOGICAL CONVERSATIONAL AND FEEDBACK SESSION



NKITAHODIE A EDI KAN

Edin a wode si din annan mu: DA:

Wo di kan da wo ho adi kyerɛ wɔn a wone wɔn rebedi nkitaho no, na adwene a ɛtae nkitahodie no akyi ne sɛ yɛbehunu wɔn afa IVF mu nanso anyɛ yie no.

Nkitahodie no ahyeɛseɛ

Mepa wo kyɛw kyerɛkyerɛ suahunu a wonyaeɛ berɛ a woyɛɛ IVF a anyɛ yie no mu.

- Atinka bɛn na wonyaɛ, sɛ woyɛ ɔbaa yi??
- Maame?

Deɛ ɛtwetwe nkitahodie no ba

1.Na wo wɔ akwanya ahodoɔ bi te sɛ yɛretwe wokunu ho nsuo ne wo nkosua de ayɛ baa ma mo, abofra a yɛte no firi baabi yɛ no yɛn ba, sɛ obi foforɔ renyinsɛn awo ama wo ?

- Ɛdeɛn na ɛkaa wo ma woyɛɛ w'adwene sɛ wobɛgye IVF no?

2. Mepa wo kyɛw ka ɔhaw a wohyiaa no bere a na woregye IVF no bi kyerɛ me?

- Kwan bɛn so na wo ankasa faa sa ɔhaw yi mu.?

3. Bere a na woreyɛ IVF no, wonyaa mmoa firi wo hokafoɔ hɔ anaa?

- Abusua?
- Mma afoforɔ?
- Nnamfofoɔ?
- Wɔn a wɔma honhom mu afutuo?
- Mantamu
- Ayaresabea?

4. Mepa wo kyɛw wo ne me nkyɛ w'adwendwene ne w'tenka wɔ sɛde esi fa teɛ wɔ bere a wafa IVF mu na anyɛ yie?

- Worefa mu sɛn?
- Wo tiboa bu wo fɔ na wo bɔ wo ho soboɔ?

5 Sɛn na wobɛkyerɛ w' anisɔ a ɛwɔ nkitahodie ne mmuaeɛ a ɛwɔ ayaresabea hɔ?

- Na ɛba no wayɔnkofa wɔ wo ne ayaresabea adwumayɛfoɔ no mu nsoeɛ?

6. Wodwene sɛ ɛho hia sɛ afutuo ne mmoa bɛkɔso wɔ berɛ a wɔreyɛ IVF no anaa?

- Kyerɛkyerɛ mu.

7. Suahunu a wanya yi, nnoɔma bi wɔ hɔ a wobɛpɛ sɛ ayaresabea adwumayɛfoɔ no bɛyɛ akwan foforɔ so, sɛ yɛma wɔn akwanya a ɛtɔ so mmienu a?

- Se ɛte saa a, ɛyɛ deɛn?

8. Deɛn na wosusu sɛ yɛnyɛ mfa mmoa mmaa awofoɔ a wɔpɛ sɛ wɔfa IVF mu no?

9. Sɛ wohwɛ wakyi a, wanu wo ho sɛ woyɛɛ IVF no bi anaa?

- Sɛ yɛka sɛ obi regye IVF a, sɛn na wote aseɛ?
  Meda wase

APPENDIX L: SAMPLE PROMPT OF THE PHENOMENOLOGICAL CONVERSATION FOR FEEDBACK SESSION

Initial conversation

The purpose of these conversation is to review the common sub-themes and major themes emerged from the previous phenomenological conversation. The intention is to allow you to clarify and validate the information from the initial conversation.

Please I will like you to consider the following questions.

Opening Conversation

- **Can you please remark on the degree to which the themes resonate your experiences?**
- **Please can you tell me if the common themes that I have identify resonate with your experiences of unsuccessful IVF treatment?**

Prompts of the Phenomenological Conversation for feedback sessions

- **Please is there enough detail to describe your own experience**
- **Do you have any example or other information to add?**
- **Please is there anything to missing?**
- **Please is there anything that needs revision?**
- **Are you satisfy with the information provided so far?**

Thank You

APPENDIX M: SUMMARY OF THE FINAL INFORMATION AND MATERIAL GATHERING

Participant	Phenomenological conversation 1	Participant feedback #1	Phenomenological conversation #2	Participant feedback #2	Reflective conversation	Information and Material Generation
Mavis	Date:19/08/16 Duration:83.o6 No. of pages: transcribed:13 Words:5986	Date:03/09/16 Duration:20.03 No. of pages transcribed:5 Words: 1694	Date:27/11/16 Duration:34.73 No. of pages transcribed:13 Words:6022	Date:01/04/17 Duration:20.10 No. of pages transcribed:11 Word:4306	Date:07/07/18 Duration:15.54 No. of pages transcribed:13 Words:5483	Total:173.46 No. of pages transcribed:55 Words:23491
Juliet	Date:23/08/16 Duration:49.09 No. of pages transcribed:11 Words:4833	Date:10/09/16 Duration:24.21 No. of pages transcribed:9 Words:3313	Date:06/11/16 Duration:33.52 No. of pages transcribed:17 Words:5204	Date:02/05/17 Duration:21.09 No. of pages transcribed:9 Words:3335	Date:13/07/18 Duration:15.07 No. of pages transcribed:11 Words:4835	Total:142.98 No. of pages transcribed:57 Words:21520
Francisca	Date:27/08/16 Duration:57.46 No. of pages transcribed:11 Words:4838	Date:16/09/16 Duration:14.37 No. of pages transcribed:8 Words:2630	Date:13/11/16 Duration:15.24 No. of pages transcribed:11 Words:3773	Date:06/01/18 Duration:13.02 No. of pages transcribed:8 Words:2698	Date:22/08/18 Duration:13.01 No. of pages transcribed:10 Words:4670	Total:113.1 No. of pages transcribed:48 Words:18609
Akos	Date:29/08/16 Duration:35.15 No. of pages transcribed:10 Words:4687	Date:18/09/16 Duration:10.18 No. of pages transcribed:3 Words:797	Date:12/11/16 Duration:14.18 No. of pages transcribed:11 Words:4529	Date:16/04/17 Duration:09.47 No. of pages transcribed:6 Words:2025	Date:15/07/18 Duration:10.07 No. of pages transcribed:9 Words:4200	Total:79.05 No. of pages transcribed:39 Words:16,238
Lois	Date:30/08/16 Duration:50.58 No. of pages transcribed:10 Words:5381	Date:12/10/16 Duration:17.47 No. of pages transcribed:7 Words:2171	Date:07/ 11/16 Duration:40.01 No. of pages transcribed:27 Words:7758	Date:08/05/17 Duration:16.50 No. of pages transcribed:14 Words:3930	Date:11/08/18 Duration:39.49 No. of pages transcribed:10 Words:5307	Total:164.14 No. of pages transcribed:68 Words24,547
Isha	Date:30/08/16 Duration:55.59 No. of pages transcribed:11 Words:4552	Date:17/10/16 Duration:35.07 No. of pages transcribed:7 Words:2171	Date:21/11/16 Duration:54.75 No. of pages transcribed:30 Words:12952	Date:23/04/17 Duration:30.71 No. of pages transcribed:18 Words:8552	Date:15/07/18 Duration:23.63 No. of pages transcribed:11 Words:4622	Total:199.75 No. of pages transcribed:77 Word32,849

Summary of General information Gathered
Total period with participants:872.38 Minutes
Total number of pages transliterated: 344
Total word count of all Transcripts:137,254