



ETHICAL ADVANTAGES OF FERTILITY AWARENESS BASED METHODS

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Abstract

Fertility, reproduction, and sexual activity were always central to the human experience and their significance and impact on the individual and the community are still crucial today.

This dissertation focuses on female fertility, the importance of fertility awareness (FA) and the many ethical advantages of Fertility Awareness Based Methods (FABMs). It explains that FABMs are methods that use natural observable changes occurring during a menstrual cycle to help women monitor their general and reproductive health. In doing so, they will be able to identify menstrual irregularities and other gynaecological problems at a very early stage. FABMs also help women to identify infertile, potential fertile and fertile times, which knowledge is also important for family planning.

This study explores the virtuous dimension of FABM practice that deals with these natural functions in a human holistic manner and promotes decisions based on prudent reasoning. In a world that seems to submit itself to a technocratic mindset, the use of FABMs is an example of the “ecological conversion” proposed in the encyclical *Laudato Si*. Consequently, the ethical value of FABMs does not pertain to any religious domain, but can be appreciated and applied by all individuals, irrespective of status, culture, and creed.

The first chapter introduces FA and FABMs. The focus of the second chapter brings to light the health, and therefore ethical, advantages of FA and FABMs, particularly regarding women's sexual, reproductive, and general health, family planning, couple relationships and growth in virtue. The third chapter explores the practice of FABMs in Malta. The dissertation concludes by presenting education as a way forward to help young girls and women identify fertility health risks and protect their future fertility. Such education will also help in the promotion of FABMs as a practice that benefits the individual woman, couples, and society.

Dedication

This dissertation is dedicated to the memory of Miriam Beck, a dear friend, mentor and colleague, whose honest and virtuous life was outstanding and inspiring.

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List of Abbreviations

ACOG	American College of Obstetricians and Gynaecologists
ART	Artificial Reproductive Technology
BBTM	Basal Body Temperature Method
BOM	Billings Ovulation Method
CrMS	Creighton Model Fertility Care System
FA	Fertility Awareness
FABM	Fertility Awareness Based Method
FEMM	Fertility Education and Medical Management
FSH	Follicle Stimulating Hormone
GnRH	Gonadotrophin-Releasing Hormone
HIS	Health Interview Survey
IRH	Institute for Reproductive Health
LAM	Lactational Amenorrhoea Method
LH	Luteinizing Hormone
MM	Marquette Model
MPC	Marriage Preparation Courses
NFP	Natural Family Planning
NPT	Natural Procreative Technology (also called NaProtechnology)
OHCHR	Office of the High Commissioner for Human Rights
PCOS	Polycystic Ovarian Syndrome
PMS	Premenstrual Syndrome
POI	Premature Ovarian Insufficiency
PSCD	Personal, Social and Career Development
RCOG	Royal College of Obstetricians and Gynaecologists
RHRI	Reproductive Health Research Institute
SDM	Standard Days Method
STM	Symptothermal Method
TDM	TwoDay Method
US	United States of America
WHO	World Health Organisation

Introduction

The Significance of Fertility and Reproduction

As a virtue of our biology, every man and woman have the potential to procreate. Whilst reproduction satisfies the intrinsic need of the human person to perpetuate the human species, the process of fertility and procreation remained a mystery for centuries. This prompted curiosity, encouraged observation, and stirred imagination. Indeed, proof of the age-old intrigue about this phenomenon lies in carvings and drawings of early civilizations and also with various symbols in ancient myths.¹ The volume of works about fertility represented in different cultures and beliefs unfold the significance of the reproduction 'wonder'.

For centuries, the intrinsic active role of the male and female in reproduction remained unclear and provided much fodder for deep thought by philosophers and scientists. Robert Graves writes how in the Pelasgian Creation Myth "[f]atherhood was not honoured, conception being attributed to the wind, the eating of beans, or the accidental swallowing of an insect."² Similarly, the Ingarda Tribe in Australia believed that a child was the result of something eaten by the mother.³ Ancient Egyptians knew that pregnancy was the result of copulation. They however, considered conception to be entirely due to the male contribution while the role of the female was to accept the seed and nourish it as it grew within her.⁴ In the thirteenth century, Thomas Aquinas supported this line of thought, although for different reasons. He understood that

¹ Zohreh Behjati-Ardakani et al., "An Evaluation of the Historical Importance of Fertility and its Reflection in Ancient Mythology," *Journal of Reproduction & Infertility* 17, no. 1 (2016): 3, <https://searchproquest-com.ejournals.um.edu.mt/docview/1772835595?accountid=27934>.

² Robert Graves, *The Greek Myths* 1955, rev. 1960, sec. 1, para. 1, http://www.24grammata.com/wp-content/uploads/2011/12/Robert-Graves-The-Greek-Myths24grammata.com_.pdf.

³ Isaac Harvey Flack, "The Pre-History of Midwifery," abridged, *Proceedings of the Royal Society of Medicine* 40, no.12 (1947): 718, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2184434/?page=6>.

⁴ Ann Macy Roth, "Father Earth, Mother Sky, Ancient Egyptian Beliefs About Conception and Fertility," in *Reading the Body: Representations and Remains in the Archaeological Record*, ed. Alison E. Rautman (Philadelphia: PENN, 2000), 189, <https://as.nyu.edu/content/dam/nyuas/faculty/documents/RothFatherEarthMotherSky.pdf>.

semen was the sole active agent for conception acting on menstrual blood to form an embryo. Females were the passive counterparts solely providing the space that allows the semen's activity.⁵

Reproduction was always central to the human experience. It expressed a desire for survival and for immortality. Fertility was a sign of prosperity and good health, and within communities, some form or other of social pressure to bear children existed through all ages in history and across all cultures and civilisations. Irrespective of whether the female held a passive role or was an equal participant in the creation of a new being, she was the one to bear and bring forth children. This made women believe that motherhood was the purpose of their existence and hence, the heavy toll of childlessness was blamed solely and squarely on them.⁶

Undeniably, childlessness was humiliating and brought women face to face with their fertility, or better still, the lack of it. Weighed down by this burden, women resorted to the supernatural, deities (usually goddesses of fertility), astrology, and anything to alleviate their plight. They wore amulets, carried out rituals and relentlessly prayed to be spared of the shame that was thought to bring about terrible personal and cultural repercussions. Two biblical texts that shed light on this unfortunate experience are the stories of Sarah and Hannah. Sarah, being unable to give Abraham a child, appealed to him to sleep with Hagar, her servant. This union produced a son, Ishmael.⁷ Hannah, taunted because her womb was barren, poured out her soul to God. She prayed for a son and vowed to offer the child to the Lord should she conceive; and so it happened and Samuel was born.⁸

⁵ Thomas Aquinas, *Summa Theologiae* I, q. 118, a. 1, ad 4; Aristotle, *De Generatione Animalium* II 3, 736a24-737b6; Jason T. Eberl, "Aquinas's Account of Human Embryogenesis and Recent Interpretations," *Journal of Medicine and Philosophy*, 30, no. 4 (2005): 379, doi: 10.1080/03605310591008559.

⁶ Victor Grech, Claire Thake-Vassallo and Ivan Callus, "Fertility in Prehistory, History and Contemporary Culture Part 1" *The Synapse* 1 (2012): 6-7, <https://www.um.edu.mt/library/oar/bitstream/123456789/12811/1/Fertility%20in%20prehistory%20and%20contemporary%20culture.pdf>.

⁷ Genesis 16, 1.

⁸ Samuel 1, 11.

Paradoxically, the reality of childlessness always co-existed with the reality of a desire to avoid conception after an act of sexual intercourse. Birth control methods found in Ancient Egypt and Mesopotamia date back to 1850 BC.⁹ Over the centuries, many a woman sought means to avoid pregnancy for some reason or other. Today, birth control can be achieved by naturally observing a woman's fertility cycle through Fertility Awareness Based Methods (FABMs) or by one of the many contraceptive measures available on the market.

The significance of fertility and reproduction, together with their impact on the community is as crucial now as it was throughout history. In today's world, "fertility and reproduction are still important issues and their social aspects extend beyond the family and involve the whole society."¹⁰ Even more so when one considers the fact that oftentimes, fertility, reproduction and sexual activity are disconnected from one another.

Individuals and couples¹¹ have a right to regulate their fertility and decide whether to have children, how many and when to have them.¹² Assuming they can conceive whenever they please, men and women around the world intentionally postpone a first-time pregnancy for various reasons and would probably limit the number of children to one or two. On the other hand, some couples attempt to take full control of their fertility by choosing to remain childless permanently. Couples at both ends of the spectrum are dismayed and badly stricken when their plans are disrupted; not becoming pregnant causes as much distress as conceiving unintentionally. Learning about one's own fertility can affect decisions regarding sexual behaviour, reproductive health, timing of parenthood and family size. It can change the way women view themselves as

⁹ William H. Robertson, *An Illustrated History of Contraception: A Concise Account of the Quest for Fertility Control* (New Jersey: The Parthenon Publishing Group, 1990), 24.

¹⁰ Behjati-Ardakani et al., "An Evaluation of the Historical Importance of Fertility and Its Reflection in Ancient Mythology," 8.

¹¹ Throughout this dissertation, the term 'couple' refers to a male and a female in a heterosexual relationship.

¹² United Nations Department of Economic and Social Affairs, "Reproductive Rights," United Nations, Population division, <https://www.un.org/en/development/desa/population/theme/rights/index.asp>.

individuals and can alter the dynamic of sexual relationships and family planning in a positive way.

The Ethical Framework

This dissertation will present ethics as a key lens through which one should look at fertility and reproduction. The underlying aim is to approach these two natural functions in a human holistic manner that is based on prudent reasoning and virtue rather than with a technocratic mindset. This approach is in line with the “ecological conversion” proposed in the encyclical *Laudato Si*.¹³

Progress in science and technology has benefited humankind immensely. Yet, today, because ‘technology’ seems to offer effective solutions to many ‘problems’, it has become common practice to consider fertility as a health issue; a ‘problem’ that ought to be controlled or quickly fixed if faulty. To a certain extent, this type of reasoning follows the existent globalised technocratic paradigm which is “silently instructing us in new habits of experiencing, reasoning and acting,”¹⁴ and “tends to absorb everything into its ironclad logic.”¹⁵

Within this paradigm, technologies “are not neutral, for they create a framework which ends up conditioning lifestyles and shaping social possibilities along the lines dictated by the interests of certain powerful groups.”¹⁶ To satisfy a desired outcome, users of a technology fall victim to the powers of that same technology and are robbed of their capacity to make sound ethical decisions. Thus, technology no longer fulfils its authentic meaning; that of honouring, serving, and healing the natural order to better the ‘integral development’ of the human condition. It becomes a manifestation of ‘technocracy’ that supplants or negates nature, while imprisoning the human person in a biased

¹³ Francis, *Laudato Si* encyclical letter, Vatican website, May 24 2015, http://www.vatican.va/content/francesco/en/encyclicals/documents/papafrancesco_20150524_encyclica-laudato-si.html, par. 216-221.

¹⁴ Nadia Delicata, “The Family and The Dominant Technocratic Paradigm: Challenges in the Digital Culture,” *Strengthening Families* eds. Józef Stala and Jadranka Garmaz, (Kraków: The Pontifical University of John Paul II in Krakow Press, 2016), 225.

¹⁵ Francis, *Laudato Si*, par. 108.

¹⁶ *Ibid.*, 107.

understanding and experience of the world, and perhaps even thwarting the original plan of creation.¹⁷ In his reflection on this cultural landscape, Pope Francis observes how

the technological paradigm has become so dominant that it would be difficult to do without its resources ... it has become countercultural to choose a lifestyle whose goals are even partly independent of [the dominant method], of its costs and its power to globalize and make us all the same.¹⁸

This dissertation shows how this is evident in the way certain contemporary medical practices deal with fertility issues and health conditions in women. It also reveals how ongoing developments in contraceptive and reproductive technologies have taken over the family planning process among many couples and have transformed the way society understands generativity. There are those who have come to perceive children as a project and parenthood as a choice, rather than a natural and expected consequence of marriage. Furthermore, to the couple desiring a child, reproductive technology may transform their desire to a 'right.' When this happens, technology not only enhances, but takes over human fertility. The very choice of parenthood becomes conditioned not, first and foremost, by the couple's relation, but by what is technically possible and achievable, even if ethically questionable. "Pregnancy ceases to be an almost miraculous event in the family's life, and instead becomes a series of biological happenings that are prodded, directed or altered technically at will."¹⁹

Fertility is a natural process that should be observed, understood and regulated through a holistic natural approach that is ultimately based on prudent reasoning and virtue. In line with natural law, this type of ethical reasoning puts a lot of emphasis on looking at the 'whole', and respecting it and helping it to flourish, rather than offering a quick-fix solution to the 'part'. In this light, this dissertation presents the many advantages of Fertility Awareness (FA) and Fertility Awareness Based Methods (FABMs) as ethical advantages because the practice of FABMs provides an opportunity to view the person holistically. The biological, psychological, emotional, and social aspects of a woman are of equal importance for her wellbeing. Through the practice of FABMs, fertility, health

¹⁷ Delicata, "The Family and The Dominant Technocratic Paradigm: Challenges in the Digital Culture," 228-236.

¹⁸ Francis, *Laudato Si*, 108.

¹⁹ Delicata, "The Family and The Dominant Technocratic Paradigm: Challenges in the Digital Culture," 241.

conditions and acquired positive outcomes from directed treatment are not addressed and valued singularly, but in relation to the general wellbeing of the whole person. Parallely, this practice provides a means of family planning that is not just applied to avoid conception; it forms part of a wider approach to sexuality, relationships, intimacy, communication, growth in virtues, and family life.

Since this approach is based on natural law, it does not pertain to any culture or religious domain, but can be appreciated and applied by all individuals, irrespective of status, culture, and creed. The Catholic Church promotes this approach precisely because it recognises its great significance. In his encyclical letter *Laudato Si*, Pope Francis addresses all of humanity, not just Catholics. He presents the dominant technocratic paradigm as the key human problem of our times, and diagnoses that a better alternative to this paradigm is “ecological conversion” and growth in virtue. It is worth noting that the argument of *Laudato Si* echoes the vision of Pope Paul VI in the encyclical letter *Humanae Vitae*. Both documents reject a certain kind of subjection of nature to human power through technology.

This dissertation will show how FA and FABM are an example of this. It outlines the numerous benefits FABMs have on women’s health and highlights the understanding of the beauty of human nature as it prepares itself for conception. It also presents the advantages of FABMs from a virtue ethic point of view, underlining the reason for acting in one way and not another, the building of good character, and the positive effect FABMs have on users and those around them.

The study also gives importance to the right to informed consent. This right carries great ethical responsibility and obligations for both the service/care provider and the recipient. It relies on the provision of adequate information from the provider, and the assurance that the receiver fully understands what he or she is about to consent to. Professionals lacking sufficient knowledge about FABMs will not be able to provide accurate information and appropriate advice about these methods; hence, these methods will not be mentioned, thus infringing a woman’s right to informed consent. The dissertation resists approaching FABMs from a purely deontological approach, where the focus would be on discussing FABMs as keeping in line, for example, with the

moral teaching of the Catholic Church. It also resists a consequentialist approach that would justify the use of FABMs solely according to the acquired result.

Outline of the Dissertation

The study focuses on female fertility, FA, and the many ethical advantages of FABMs that benefit women, families, and society. It indicates how nature provides females with the opportunity to monitor their reproductive and general health, and how to plan their families through prudent reasoning and virtue. The study tries to do so in particular in the context of Malta, that has traditionally been a Catholic country. At certain points, FABMs are discussed in contrast to the alternatives of contraception and Artificial Reproductive Technology (ART). Contraception is commonly considered as the most reasonable solution to avoid pregnancy, thus controlling family size, whilst ART is promoted to combat infertility by making a pregnancy achievable even if ethically questionable.

The first chapter introduces FA and FABMs. It starts by going through scientific discoveries and developments that have established conception and embryonic development. It presents the physiological changes that occur during a woman's menstrual cycle and explains how FA is based on close observation of these changes that manifest in noticeable natural signs, referred to as biomarkers or fertility indicators. It demonstrates how fertility indicators are key factors in the practice of FABMs. This chapter also explains how based on scientific research, FABMs have been structured by the standardisation of the precise logging of observations for better recognition, understanding and interpretation. The chapter proceeds to discuss different aspects of FA and explains different practices of FABMs.

The focus of the second chapter brings to light the ethical, and therefore health advantages of FA and FABMs. It then reveals how FABMs expose the state of a woman's fertility potential, her overall reproductive health and her general health. It goes on to explain how FABMs act as a diagnostic tool to diagnose underlying conditions of common female health issues. This chapter then describes the ethics and relevance of FABMs regarding family planning, couple relationships and growth in virtue.

The third chapter explores the practice of FABMs in Malta within the context of Malta's Catholic heritage, the influence of a rapid secularisation process and the impact of a global technocratic paradigm. This chapter investigates the reasons for the lack of FA among the Maltese population and the rejection of FABMs as scientific methods by health care professionals. It goes on to explain the importance of proper sexual and fertility education along the life course in an age appropriate manner, and the importance of FABMs education among health practitioners.

The dissertation will conclude by reaffirming FABMs as a sound ethical approach to a woman's sexual, reproductive, general health and family planning. As stated earlier, the ethical values of FABMs are applicable to all women and couples around the world, even though the practice of FABMs is in line with the moral teaching of the Catholic Church.

Chapter 1

Fertility Awareness Based Methods

1.1 Introduction

The first chapter will discuss Fertility Awareness Based Methods (FABMs) as a practice which monitors and maintains a woman's reproductive health. After a brief description of the scientific developments in the recognition of fertility and reproduction, this chapter will present different aspects of fertility awareness (FA) and the physiological changes that the menstrual cycle brings about. These changes are made visible by biomarkers or fertility indicators, that act as key protagonists in FABMs. Different FABMs will subsequently be considered and the required techniques for their practice explained.

1.2 Fertility and Reproduction

Fertility and reproduction always played utmost importance for human lineage to survive. Scientific interest and continued research in these areas led to major breakthroughs. The invention in the mid-seventeenth century of the microscope by Anton van Leeuwenhoek impacted all areas of research and thought, including the reproductive arena. Individual cells were seen for the first time, yet there still was little understanding as to how a child was conceived biologically and how it subsequently developed. The theory of preformation emerged, sustaining that each human being carried its own tiny offspring in miniature. This, however, failed to determine how both parents contributed to their offspring if each carried a miniature human being inside them.¹ In time, microscopy improved, and scientists were continually making new

¹ Peter J. Bowler, "Preformation and Pre-Existence in the Seventeenth Century: A Brief Analysis," *Journal of the History of Biology* 4, no. 2 (1971): 228, <https://www-jstororg.ejournals.um.edu.mt/stable/pdf/4330559.pdf?refreqid=excelsior%3A38c0bea06d07d7538be1a%3Adbb876c6ecc>.

discoveries. In 1876, Oscar Hertwig reported observation of fertilization in mammals.² From this point forward, scientists' unceasing efforts in research and experimentation, made advancements that paved the way to what we know today about fertility and reproduction.

In 1904, Dutch gynaecologist Theodoor Hendrick Van de Velde confirmed what Mary Putnam Jacobi, a Harvard scholar, had observed regarding a body temperature rise during the cycle. He recognised the connection between the shift in temperature and ovulation. Van de Velde noted that whilst the period from ovulation to menstruation was always more or less the same, the period from menstruation to ovulation varied, indicating that ovulation may be less punctual or tied down to scheduled performance.

In the 1920s and 1930s, Hermann Knaus in Austria and Kyusaku Ogino in Japan were carrying out research independently from one another. They both observed that ovulation occurred between 12 to 16 days before the next menstrual period. They also noticed that an unfertilized ovum had a short life span of less than one day.³ The identification of a repeated pattern in the cycle gave birth to the Rhythm Method that calculated fertile and infertile periods according to the length of previous cycles. In 1932, Leo John Latz, a Chicago doctor and a fervent proponent of this approach, published *The Rhythm of Sterility and Fertility in Women*, and sold more than 200,000 copies within ten years. By 1959, UK Professor John Marshall established the details of Van de Velde's observations, created special charts and issued instructions for their use.⁴

The presence of mucus during the cycle had been observed for centuries and in 1868 James Marion Sims asserted that mucus could either aid or block sperm migration. In 1933, there was enough evidence that cervical secretions were related to a rise in urinary oestrogen, a rise heralding ovulation. This provided a good foundation for the

² Gary N. Clarke, "A.R.T. and History, 1678–1978," *Human Reproduction* 21, no. 7 (2006): 1648, <https://doi.org/10.1093/humrep/del067>.

³ Elizabeth Clubb and Jane Knight, *Fertility*, (Devon: David & Charles, 1996), 10.

⁴ Marguerite R. Duane and Erin Adams, "A Brief History of Scientific Advances and Development of Natural or Fertility Awareness Based Methods (FABMs): Part I," *Fertility Appreciation Collaborative to Teach the Science*, June 19, 2018, <https://www.factsaboutfertility.org/a-brief-history-ofscientific-advances-and-development-of-nfp-methods-part-i/>.

work carried out by John Billings who published *The Ovulation Method* in 1964. Further research was carried out by Billings and his wife Evelyn. They published their findings in the *Lancet* in 1972. They asserted that menstruation is followed by a number of days in which there is no vaginal loss (dry days); the presence of mucus increases and changes in consistency; the number of days in this phase varies; and the timing of intercourse determines the possibility of a pregnancy. The refined Ovulation Method was now known as the Billings Method, a method that became widely used and referred to as Natural Family Planning (NFP). This required couples to identify the fertile days to achieve a pregnancy and abstain from sexual intercourse during the fertile time to avoid a pregnancy. In the mid-70s, Thomas Hilgers, an American gynaecologist who had worked closely with Billings, investigated the method in more depth and developed a standardised approach to monitoring and charting cervical mucus. He soon introduced the Creighton Model of Fertility Care System (CrMS) in the United States (US).

These scientific advancements coincided with new realities. World leaders were concerned with population growth, health authorities were appalled by maternal and neonatal deaths, and couples faced financial difficulties to cope with large families. Controlling family size seemed to be the only way forward in the developing world, the US and Europe. Oral contraceptives were introduced as a safe way for couples to engage in sexual intercourse without the risk of pregnancy. The Catholic Church too was concerned with the ordeal families were facing. In 1968 the encyclical letter *Humanae Vitae* of Pope Paul VI reaffirmed the teaching of Pius XI's *Casti Connubii* against the use of contraceptives. However, Paul VI conceded that for "serious reasons and with due respect to moral precepts"⁵ limiting the number of births within a family unit was a responsible decision. While birth control and contraception became a prerogative for governments, the application of scientific results to help couples space their children was important for those who had ethical or moral objections to the current trends of contraception; among these people were the Billings and Hilgers. Their methods became increasingly popular among Christian couples.

⁵ Paul VI, *Humane Vitae* encyclical letter, Vatican website, July 25, 1968, http://www.vatican.va/content/paul-vi/en/encyclicals/documents/hf_pvi_enc_25071968_humanae-vitae.html, sec. 10.

Researchers were continuously achieving desired results. Physical realities became scientifically measurable and could be documented. Scientists could not only determine the time of ovulation; they could now measure hormone production levels and their effects on fertility and infertility. Faith and prayer were not the only recourse for women dealing with fertility issues. Discourse about reproduction was now about facts and not only mystery. At the same time, while science could easily explain the mechanics of reproduction in an accurate way, the fact that as a discipline science needs to be revised constantly indicates that there is always a phenomenal aspect that has still to be unlocked.

1.3 Fertility Awareness

Fertility awareness (FA) can simply refer to the information acquired by an individual about the anatomy and physiology of the male and female reproductive systems, and/or the very basic knowledge that a woman has about being able to conceive during a particular time during her cycle. It is also considered as fundamental to Family Planning (FP)⁶

The Institute for Reproductive Health (IRH) founded in 1985 as part of the Georgetown University Medical Center, with the aim to address family planning gaps worldwide, widens the definition.

Fertility awareness is actionable information about fertility throughout the life course and the ability to apply this knowledge to one's own circumstances and needs. Specifically, it includes basic information about the menstrual cycle, when and how pregnancy occurs, the likelihood of pregnancy from unprotected intercourse at different times during the cycle and at different life stages, and the role of male fertility. Fertility awareness also can include information on how specific FP methods work, how they affect fertility, and how to use them; and it can create the basis for understanding, communication about and correctly using FP.⁷

⁶ Clubb and Knight, *Fertility*, 13.

⁷ Institute for Reproductive Health, *Fertility Awareness across the Life Course: A comprehensive literature review*. (Washington, DC.: IRH, 2013), 4, <http://irh.org/resource-library/a-comprehensiveliterature-review-fertility-awareness-across-the-life-course/>.

For a man, FA is about understanding the male reproductive potential; how males are assumed to be fertile from puberty well into old age; how male fertility does not manifest itself in external, visible, measurable signs; and that male fertility and infertility can only be assessed by means of relevant investigations.

For a woman it is about understanding that females have a fertility lifespan, from menarche to menopause, during which time there are fertile and infertile phases. FA brings a woman closer to her own natural rhythm; it gives meaning to the evident changes occurring during a menstrual cycle; and explains how being attentive to changes help identify fertile and infertile phases and any abnormal occurrences within the cycle.

For a couple, as referred to by the IRH, FA is about accepting each other's fertility and understanding the distinctive and combined procreative potential at different stages of their life according to their specific circumstances and needs.

In her book *The Complete Guide to Fertility Awareness*, Jane Knight, a midwife and fertility nurse specialist in NHS, presents FA as an ongoing body literacy process throughout a woman's life journey. She explains how FA helps teens understand their body as it transitions through puberty, which occurs between the age of 10 and 14, to fertility age. She also states how FA gives meaning to the physical changes of the body and the development of sex characteristics; how knowing one's body helps to maintain sexual and reproductive health; and how FA helps adolescents understand the female reproductive lifespan. Knight talks about FA in relation to planning a pregnancy, preconceptual care, and early detection of subfertility. She explains how FA helps women understand changes after childbirth and during breastfeeding. Moreover, Knight shows how FA brings a woman in tune with her body as it prepares for menopause. She also considers FA as a primary tool in recognising changes that may indicate a possible pathological condition.⁸

In the *Myles' Textbook for Midwives*, Jayne Marshall and Maureen Raynor present FA as a "fascinating observation of the way in which the female body works to produce the

⁸ Jane Knight, *The Complete Guide to Fertility Awareness* (London: Routledge, 2017), 3-6.

optimum conditions for conception.”⁹ This work falls within the menstrual cycle, the main function of which is precisely to prepare the egg (oocyte) for fertilization by spermatozoa and to prepare the uterus to receive and nourish a fertilized oocyte.

1.4 The Menstrual Cycle

Each menstrual cycle occurs under the influence of hormones in a biofeedback system. Fluctuating levels of hormones cause physiological changes in the ovaries, the endometrial layer of the uterus and the production of cervical secretions.¹⁰

Every female is born with a finite number of oocytes. Each oocyte is surrounded by follicular cells and a mature oocyte (ovum) is released on a cyclical basis from menarche to menopause. The cycle is divided in three phases. It starts with menstruation which also initiates the follicular phase. During this phase, low levels of oestrogen and progesterone cause the hypothalamus to produce gonadotrophin-releasing hormone (GnRH) that stimulate the nearby pituitary gland to secrete Follicle Stimulating Hormone (FSH). FSH is responsible for the development of several follicles, which in turn start to produce oestrogen. Oestradiol, a component of oestrogen, controls the re-building and thickening of the endometrium. As it reaches a peak level, it inhibits further secretion of FSH and subsequently slows the growth of the follicles but does not stop the most dominant follicle from continuing to develop and release oestrogen. A high level of oestrogen signals the hypothalamus to release gonadotrophin-releasing hormone (GnRH) that stimulates a surge of luteinizing hormone (LH) from the anterior lobe of the pituitary gland.

The ovulatory phase commences with the surge in LH that weakens the wall of the follicle and allows the release of the mature oocyte. The process of ovulation typically occurs within 30 to 40 hours of the LH surge. The ovum is fertilisable for 24 hrs, and there is also a possibility of a second ovum being released within the next 24hrs. The

⁹ Jayne Marshall and Maureen Raynor, *Myles Textbook for Midwives* (Edinburgh: Elsevier Health Sciences, Churchill Livingstone, 2014), Kindle edition, 582.

¹⁰ The material in this section is taken from Marshall and Raynor, *Myles Textbook for Midwives*, 91-95 and Knight, *The Complete Guide to Fertility*, 45-59.

oocyte, fertilized or not, travels to the uterine cavity guided by cilia and peristaltic muscular contractions of the fallopian tube. Oestrogen has a simultaneous effect on the cervical glands as they secrete a flow of loose alkaline mucus that attracts sperms.

The luteal phase follows ovulation. During this phase, what remains of the ruptured follicle, turns into the corpus luteum which produces progesterone, oestrogen, relaxin and inhibin for several days. In the case where an oocyte is fertilised, progesterone thickens the endometrium preparing it for implantation and nourishment of a potential embryo. It is also responsible for thickening of cervical mucus to prevent sperms or bacteria entering the uterus. The corpus luteum remains active until a developed placenta takes over. Progesterone also causes a rise in body temperature. In the absence of fertilisation, the corpus luteum degenerates causing a decrease in levels of progesterone and oestrogen that in turn signal the hypothalamus to secrete GnRH and the cycle starts again.

Throughout the cycle each structure and gland are affected by the activity of the others and makes up for varying levels of hormones at different stages of the cycle. The average length of a menstrual cycle is 28 days with menses lasting between two to seven days. However, a woman may experience a cycle every 21 to 35 days, all falling within a normal bracket. Whatever the length of the cycle, it still constitutes of three phases. The interval between the first day of menstruation up to ovulation varies in length in every woman and may also alter from month-to-month in the same woman; this is what makes a short or long cycle. The luteal phase, the time from ovulation to the next period, is usually constant.

Apart from physiological changes happening within the reproductive system, hormones are also responsible for changes that can be observed externally. These external biomarkers are the fertility indicators used to understand and identify fertile and infertile times of the cycle.

1.5 Fertility Indicators

Fertility indicators refer to noticeable changes that occur throughout the menstrual cycle. The main purpose of taking note of these indicators is to know when ovulation occurs and identify the fertile and infertile days of a cycle to confirm the fertile window.

The fertile window constitutes the first day of the presence or sensation of mucus, the life span of sperm, the lifespan of the ovum and the lifespan of a possible second ovulation. The intention of identifying the fertile window is to achieve or avoid a pregnancy.¹¹

There are three major indicators: changes in the waking body temperature, changes in cervical secretion (mucus), and changes in the cervix. There are also minor indicators such as mittelschmerz pain, commonly referred to ovulation pain, breast changes and calendar calculations based on the length of previous cycles. Women opting to follow a fertility awareness programme are taught to recognise, monitor, and record these indicators daily and accurately. Observations are logged on a fertility chart or a downloaded fertility application purposely designed by reliable companies. A complete fertility chart will reveal a correlation of the fertile days established by the body temperature, cervical secretion, and cervical palpation. Every woman is different, and changes in the indicators vary from woman to woman.

1.5.1 Body temperature

The first major indicator is the body temperature. Oestrogen released during the follicular phase, that is the first part of the cycle, keeps the temperature at a lower level. After ovulation, there is a progesterone increase that raises the temperature by 0.2°C. It is common to have a dip in temperature before the rise. The first high temperature reading occurs one or two days after ovulation. If there is no fertilisation then progesterone levels fall as the corpus luteum degenerates. The temperature however remains elevated until the start of the next menstrual cycle before it falls. If, on the other hand, an ovum is fertilised, the temperature will remain high, and even increase slightly in response to the progesterone which is continuously being released by the corpus luteum.

¹¹ Information about fertility indicators was taken from Knight, *The Complete Guide to Fertility Awareness*, 92-150; Marshall and Raynor, *Myles Textbook for Midwives*, 582-584; Thomas Hilgers, *The Medical and Surgical Practice of NaProTechnology* (Nebraska: Pope Paul VI Institute Press, 2004), 259-275; Faculty of Sexual and Reproductive Healthcare, *Clinical Guideline: Fertility Awareness Methods* (London: FSRH, 2015), 10-12, <https://www.fsrh.org/standards-andguidance/documents/ceuguidancefertilityawarenessmethods/>.

Body temperature varies during the day under the influence of the circadian rhythm. It is at its lowest when the body is at complete rest, most likely at about 4.30am.¹² For the purpose of temperature charting, women are advised to take their temperature first thing in the morning before getting out of bed and before doing anything less, at around the same time every day. This will give a waking temperature baseline. It is essential to use a specifically designed low grade thermometer with an expanded narrow scale. Nowadays, battery operated digital thermometers make it easier for temperature taking and recording as they feature a fast recording time, an audible beep that confirms an established temperature and a temperature recall of the last temperature/s taken. The waking temperature is then recorded on the fertility chart or appropriate digital application.

Accurate charting of the waking temperature will reveal a biphasic temperature pattern with a shift to a higher level after ovulation. The rise in body temperature suggests that ovulation has in fact taken place. This retrospective information indicates the end of a fertile window and fails to predict the approaching fertile phase and ovulation. While temperature recording on its own may be of importance for any woman wanting to know more about her cycle, it is of little or no use in planning to conceive or to avoid a pregnancy. It is, however, useful in combination with other indicators.

1.5.2 Cervical secretions

Cervical secretion is the second major indicator. The epithelium lining of the cervical canal produces secretions throughout the cycle; hormones play an important role in the quantity and quality of the secretions. At the beginning of the cycle, right after menstruation, the vagina is commonly dry. As the level of oestrogen escalates, cervical secretions increase. The onset of the mucus symptoms is characterised by the appearance of white, opaque sticky mucus. As ovulation approaches, mucus becomes profuse and changes to a watery, clear, slippery discharge resembling the raw white of egg. This type of mucus, known as spinnbarkeit mucus, typically lasts for one or two days. The last day of its appearance is referred to as the peak day of fertility. This is

¹² Knight, *The Complete Guide to Fertility Awareness*, 96.

because the change in texture and quantity makes it a hospitable medium that attracts sperm and facilitates its entry into the cervical canal. Sperms can live up to seven days in the female genital tract in favourable conditions. After ovulation, progesterone, secreted by the corpus luteum, inhibits the secretion of mucus and also affects its consistency. The secretion becomes thick and forms a plug in the cervix of the uterus thereby acting as a barrier to sperm and bacteria. Secretion will remain thick, sticky and dry for some days. It can remain so until the next menses or disappear altogether.

Observing cervical secretion involves noting its quantity, quality, consistency, and colour at designated intervals during the day. It also includes getting used to the subtle cue of vaginal sensation. Whilst cervical secretions can be seen and touched, sensation depends more on a feeling of vaginal wetness or dryness. The peak day can be identified retrospectively when it is followed by a thicker type of mucus.

Observations are plotted accurately on the same chart or application used for temperature recording. Regular charting will reveal a cyclical repeated pattern and a peak day that correlates closely with ovulation and the shift in temperature. Contrary to the waking temperature, the presence of cervical secretion is the best prospective fertility marker. It is also a valuable tool for women with long or irregular cycles. In women who have scant mucus, learning to interpret vaginal sensation is of utmost importance as a change in sensation may be the first sign of the fertile phase.

To use cervical mucus as a single indicator, one must keep in mind that various factors can change the appearance of cervical mucus and hence interfere with the correct interpretation and charting. These include medications, soap products, breastfeeding, intercourse, or a vaginal examination for which a lubricant is used.

1.5.3 Cervical palpation

Cervical palpation is the third major indicator. During a menstrual cycle, the cervix, which is the lower part of the uterus projecting into the vagina, undergoes subtle changes in position, consistency, and dilation in response to hormones. The low oestrogen level following menstruation makes the cervix feel low and easy to reach; it feels firm, moist, closed, and tilted against the vaginal wall. Other changes occur gradually as oestrogen rises, and the fertility phase approaches. The cervix is felt higher

in the vagina; it becomes softer, wetter, and slightly more open than on previous days. During ovulation, the cervix will be felt higher, and at times difficult to reach. It shifts towards the centre, feels even softer and wetter and as it relaxes, it will open slightly more. The position of the cervix and its softness, together with the clear cervical mucus, attracts sperm and enables it to enter through the cervical canal. After ovulation, when oestrogen levels decrease and progesterone increase, cervical changes are more abrupt. The cervix will once again feel low, firm, slightly moist or even dry and tightly closed.

Palpation of the cervix is carried out daily at about the same time of the day except during menses. Women are taught how to carry out a palpation and how to aptly record it on the fertility chart or application. Cervical palpation provides valuable information indicating pre-fertile, fertile, and post-fertile days of the cycle.

1.6 Fertility Awareness Based Methods

The standard method to monitor ovarian function and confirm ovulation is through ultrasonography and specific hormone testing. These methods are expensive and time consuming. However, Fertility Awareness Based Methods (FABMs) show the same reliable results for determining the fertile window and predicting the time of ovulation.¹³

FABMs is an umbrella term that encompasses all methods involving women's own observations of the above-mentioned fertility indicators either singularly or in combination with others. FABMs are scientific evidence-based methods; they have come a long way from the Rhythm Method practiced in the 1930s. Among the FABMs practiced today are the Billings Ovulation Method (BOM), the Creighton Model Fertility Care System (CrMS), the Marquette Model (MM), the Standard Days Method (SDM), the TwoDay Method (TDM), the Basal Body Temperature Method (BBTM) and the

¹³ Annelies Thijssen et al., "Fertility Awareness-Based Methods' and Subfertility: a Systematic Review," *Facts, Views & Vision in ObGyn* 6 no. 3, (2014): 113–123, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4216977/>.

Symptothermal Method. The Lactational Amenorrhoea Method (LAM) is also included even though this is a temporary method.¹⁴

1.6.1 The Billings Ovulation Method (BOM)

The BOM, often referred to as the Billings Method, relies solely on the observation of vaginal mucus. The identification of the onset of any type of mucus is vital as it is considered potentially fertile mucus and marks the onset of the fertile phase. A coloured stamp system is used to record the days of menstruation and different types of secretions: red for bleeding, white with a baby picture for clear watery mucus (fertile day), and green for dry days (infertile days). As described earlier, cervical secretion increases gradually after menstruation and changes to a spinnbarkeit type of mucus marking peak day and indicating ovulation. However, hormonal studies have shown that ovulation can occur a day before peak day, on the day of peak day or up to two days after.¹⁵

The BOM can be used to attain a pregnancy by engaging in sexual intercourse every day or every other day when secretions start to become loose, thin and slippery and particularly on peak day. When opting for this FABM to avoid pregnancy, couples abstain from sexual intercourse from the onset of any type of mucus till the fourth evening after mucus peak. This covers the lifespan of the sperm, the ovulatory phase and makes sure the lifespan of the ovum has elapsed.

1.6.2 The Creighton Model Fertility Care System (CrMS)

The CrMS requires a far more rigorous checking of cervical secretions and a more detailed recording system. Observing the changes and examining the quality, quantity, texture, colour, and the vaginal sensation is extremely important as the CrMS is also a single indicator method. It helps couples achieve pregnancy as it indicates the onset of the fertility phase by means of thorough observation of the mucus. Similarly, to the

¹⁴ Knight, *The Complete Guide to Fertility Awareness*, 187-195; Marshall and Raynor, *Myles Textbook for Midwives*, 582-584; Faculty of Sexual and Reproductive Healthcare, *Fertility Awareness Methods*, 10 – 12.

¹⁵ Knight, *The complete Guide to Fertility Awareness*, 135.

BOM, if CrMS is used to avoid conception, the couple refrains from sexual intercourse and any form of genital contact from the day secretions appear until three days after mucus peak.

Detailed instruction in the CrMS offers clear guidelines on how to monitor and record mucus in different circumstances and what to do in such situations. This FABM is also the foundation of Natural Procreation Technology (NPT, also known as NaPro) a system that monitors and manages women's gynaecological health. NPT will be discussed in the second chapter.

1.6.3 The Marquette Model (MM)

The MM of fertility awareness observes and measures a woman's fertility status by tracking hormone levels in urine. Urine is tested in the morning using a special test strip that is then placed in a fertility monitor. The device measures the urinary levels of LH and oestrogen and indicates three possible levels of fertility – low, high, or peak that are charted as 'L', 'H' and 'P' respectively. This method is suitable for women with cycles lengths of 21 to 42 days and is especially designed for those wishing to become pregnant. The method is usually combined with the observations of vaginal secretions. The MM does not exhibit warning signs of the onset of fertility mucus and therefore is not suitable for those couples wishing to avoid a pregnancy. However, a fertility window may be established by a fertility practitioner using calculations made from observations of six previous cycles.

1.6.4 The Standard Days Method (SDM)

The SDM applies standard rules to determine the fertile days of the menstrual cycle. The SDM considers the fertile window to be from the eighth day to the nineteenth day of the cycle. This window is the ideal time for couples to have intercourse every day or every other day should they wish to conceive, or conversely, abstain to avoid a pregnancy. This FABM is made simpler using CycleBeads. Cyclebeads constitute a string of 33 coloured beads and a rubber ring. Each bead represents a day of the menstrual cycle. The woman places the rubber ring on the red bead on the first day of the cycle and moves the ring one bead every day in the direction of the arrow shown. On the

days when the ring is on the dark coloured beads, it is very unlikely to conceive after engaging in sexual intercourse. The light-coloured beads, from day 8 through 19, indicate the fertile window and therefore the likelihood of pregnancy after intercourse. CycleBeads comes in the form of a digital application too.

1.6.5 The TwoDay Method (TDM)

The TDM also relies on the presence of cervical secretion. It was intended to offer a simpler way of determining the presence of fertile mucus and reducing the number of days of abstinence. With this FABM, one must check cervical secretions at least twice a day and then determine two things: the presence of secretions on the day and on the previous day. The presence of mucus either day indicates fertility and intercourse on these days is likely to result in a pregnancy. The absence of cervical mucus for two days in a row makes pregnancy less likely.

1.6.6 The Basal Body Temperature Method (BBT)

The BBT method uses the waking temperature as a key factor. Monitoring will show an increase of 0.2°C in temperature after ovulation. The temperature remains high until the end of the menstrual cycle. With this FABM, there is no prospective indication of the onset of the fertility phase, therefore, the fertile time is assumed to start on the first day of the cycle and lasts till the third day after a temperature rise providing it is at least 0.2°C higher than the highest recording of the six temperatures preceding the temperature shift. The infertile phase then lasts until the next menses.

Using the BBT method as a sole indicator to avoid pregnancy requires a long period of unnecessary abstinence. Its use to achieve a pregnancy is also debatable as it can only determine that ovulation has occurred in retrospect. However, the method is a relevant tool for those women seeking to establish that ovulation has in fact occurred.

1.6.7 The Symptothermal Method (STM)

The STM uses a combined indicator approach. Combining fertility indicators is advantageous because the fertile phase and ovulation can be predicted by the presence of cervical secretions which lead to peak day, double checked by feeling changes of the

cervix on palpation and confirmed by the rise in body temperature after ovulation. Like other methods, the STM carries its own rules to which users must be faithful. Experienced users tend to eventually adhere to the temperature and the observations of cervical mucus to confirm and double check their fertility phase. The reliability of this FABM is attributed to the double-checking system to confirm the start and end of the fertile window.

1.6.8 The Lactational Amenorrhoea Method (LAM)

Lactational amenorrhea refers to the absence of a menstrual period in women who breastfeed. Frequent suckling on the breast sends nerve impulses to the hypothalamus affecting the pulsatile secretion of GnRH which in turn inhibits the release of LH from the pituitary. The diminished level of LH prevents follicular maturation and ovulation. The high level of prolactin brought about by frequent suckling on the breast and by the presence of oestrogen suppresses both menstrual bleeding and ovulation. Besides, these effect the lactotroph cells in the pituitary gland which are responsible to produce prolactin. Oestrogen also suppresses the release of dopamine which if present, inhibits the formation of prolactin.

Because of this biofeedback system, it is assumed that ovulation will not occur during exclusive breastfeeding, therefore the LAM to avoid conceiving can only be used by mothers who breastfeed exclusively during the first six months unless menses has occurred. Missing a feed can trigger hormonal function and the onset of menstrual bleeding and ovulation can occur at any point even if still breastfeeding regularly but not completely. Breastfeeding women who get a period in the first six months post-partum, wean their baby before six months or have breast-fed for six months are advised to use another FABM so she can recognise and understand her body as it shifts back to a pre-pregnancy state and the hormonal cycle is eventually restored.

1.7 Conclusion

Reliability on the practice of any FABM depends on several factors, the most important of which are the proper teaching by trained practitioners and the willingness of the couple, or woman, to adhere scrupulously to guidelines. Well informed couples and

women can then decide to opt for a method over another after having discussed their needs and intentions with a fertility practitioner. Communication with the practitioner is also essential especially when observations are dubious necessitating the experience and trained eye of a professional to assist and aid with interpretation.

When talking about reproduction and fertility awareness, it is practically impossible to separate them from family planning, be it to achieve or avoid a pregnancy. Without sidelining this very important experience, this dissertation, however, intends to go far beyond family planning. It is meant to bring to the forefront the succinct message that fertility awareness is of paramount importance to every female, from puberty through to menopause, in any state she might be in - married, single or cloistered. Hence it is not only geared to be a means of family planning. The subsequent chapter will discuss how women who choose a FABM will become proficient in knowledge about their normal body rhythm so much so that should there be any deviation or irregularity they would see this as a red flag and follow through with seeking medical advice and further investigation if and when necessary.

Chapter 2

Ethical Advantages of Fertility Awareness and FABMs

2.1 Introduction

This chapter will express the focus of this study as it analyses the ethical advantages of Fertility Awareness (FA) and FABMs from a two-fold perspective. It will present the ethical advantages of FABMs as a diagnostic tool for women's health and go on to describe the ethics behind these methods in view of family planning, relationship between a couple, and growth in virtue.

2.2 FABMs and Women's Health

This first part of the chapter will present the ethical advantages of FABMs for adolescents and women to monitor and manage their reproductive and general health in view of their right to health., knowledge, patient participation and informed consent. It will also show the ethical benefits of FABMs as a diagnostic tool for women and clinicians to identify and treat related health issues by applying Natural Procreative Technology or Fertility Education and Medical Management protocols.

2.2.1. Monitoring reproductive and general health

The right to health was addressed in the Universal Declaration of Human Rights in 1948. Since then, there has been increasing attention by various human rights treaty-monitoring bodies.¹ There is sufficient research to show that FABMs help women

¹ Office of the United Nations High Commissioner for Human Rights and the World Health Organization *The Right to Health, Fact Sheet No.31*, (Geneva: Office of the High Commissioner for Human Rights, 2008), 1.
https://www.ohchr.org/_layouts/15/WopiFrame.aspx?sourcedoc=/Documents/Publications/Factsheet31.pdf&action=default&DefaultItemOpen=1.

recognise their health status.² In 2017, the American College of Obstetricians and Gynecologists (ACOG) reaffirmed their position that the menstrual cycle is a vital sign of a woman's general health: "Just as abnormal blood pressure, heart rate, or respiratory rate may be key to diagnosing potentially serious health conditions, identification of abnormal menstrual patterns in adolescence may improve early identification of potential health concerns for adulthood."³ According to Pilar Vigil, Leonard F. Blackwell, and Manuel E. Cortés, "[t]he presence of ovulation indicates that the woman is in good health."⁴ Phil Boyle, a general practitioner with a special interest in infertility, points out that cycle tracking can mirror poor health, reveal certain conditions and lead couples to identify a potential fertility difficulty before they even try to conceive.⁵

FABMs are highly beneficial in this regard since women who use these methods "are so aware of what is normal for them that they can help their clinician determine irregularities based on their own cycles."⁶ Identifying and treating pathological conditions early, can significantly lower the risks of further complications and possible fertility difficulties.⁷

The following table shows the main causes of fertility problems.⁸ Since FABMS are based on hormonal changes that effect the female fertility cycle, certain conditions like tubal blockage cannot be picked up. It is also important to note that FABMs cannot indicate

² Richard J. Fehring, Mary Schneider, and Kathleen Raviele, "Variability in the Phases of the Menstrual Cycle," *Journal of Obstetric Gynaecologic & Neonatal Nursing* 35, no. 3 (2006):376-84, DOI: 10.1111/j.1552-6909.2006.00051.x; Vaishali B. Popat et al., "The Menstrual Cycle: A Biological Marker of General Health in Adolescents," *New York Academy of Sciences* 1135, no.1 (2008):43-51, DOI: 10.1196/annals.1429.040.

³ The American College of Obstetricians and Gynaecologists, "Menstruation in Girls and Adolescents: Using the Menstrual Cycle as a Vital Sign," no. 651, 2, <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2015/12/menstruation-in-girls-and-adolescents-using-the-menstrual-cycle-as-a-vital-sign.pdf>.

⁴ Pilar Vigil, Leonard F. Blackwell, and Manuel E. Cortés, "The Importance of Fertility Awareness in the Assessment of a Woman's Health: A Review," *The Linacre Quarterly*. 79, no. 4, (2012): 428 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6027096/>.

⁵ Phil Boyle, *Neo Fertility, Advanced Fertility Care Through Cycle Tracking* (Dublin: 2018), Kindle Edition, 26.

⁶ Toni Weschler, *Taking Charge of Your Fertility* (New York: Harper Collins,2015), Kindle Edition, 6.

⁷ Vigil, Blackwell, and Cortés, "The Importance of Fertility Awareness in the Assessment of a Woman's Health: A Review," 79.

⁸ World Health Organisation, "Infertility," accessed on October 2, 2020, <https://www.who.int/news-room/fact-sheets/detail/infertility>.

any of the male fertility problems. However, a couple using a FABM, who together with the clinician can recognise a normal ovulatory and fertility cycle, can move on to investigate male fertility sooner to address their fertility problem.

Causes of infertility	
Female	Male
Disorders of the fallopian tubes <ul style="list-style-type: none"> • blocked fallopian tubes 	Obstruction of the reproductive tract <ul style="list-style-type: none"> • blocked ejaculatory duct • blocked seminal vesicles
Disorders of the uterus <ul style="list-style-type: none"> • endometriosis • septate uterus • fibroids 	Hormonal disorders leading to abnormalities in hormones produced by <ul style="list-style-type: none"> • pituitary gland, • hypothalamus • testicles
Disorders of the ovaries <ul style="list-style-type: none"> • polycystic ovarian syndrome • other follicular disorders 	Azoospermia <ul style="list-style-type: none"> • testicular failure to produce sperm
Disorders of the endocrine system <ul style="list-style-type: none"> • imbalances of reproductive hormones • hypopituitarism • hypothyroidism 	Abnormal sperm count, function, and quality <ul style="list-style-type: none"> • low sperm count • abnormal morphology • abnormal motility
Environmental and lifestyle factors that may affect fertility <ul style="list-style-type: none"> • smoking • excessive alcohol intake • obesity • exposure to environmental pollutants and toxins 	

FABMs are also known to be beneficial for women athletes. Since hormones affect energy levels, an athlete can determine her need for rest and her optimal performance days if she is fully aware of what phase of the cycle she is at. Women athletes are nowadays advised to follow tailored exercise and nutrition plans according to their cycle for better performance.⁹

⁹ Stacy Sims, "Women are Not Small Men: a Paradigm Shift in the Science of Nutrition," filmed 2019, TED video, 9:09, https://www.ted.com/talks/stacy_sims_women_are_not_small_men_a_paradigm_shift_in_the_science_of_nutrition.

2.2.2 Identifying irregularities

Jane Knight and Thomas Hilgers give a thorough explanation of how reproductive health disorders manifest themselves in the menstrual cycle.¹⁰ Understanding the key events of a normal menstrual cycle is therefore of utmost importance. As explained in the first chapter, the cycle depends on the synergy between a cascade of hormones and optimal function of several glands. Any disturbance to this process can disrupt the biofeedback hormonal system resulting in cyclic irregularities that can be identified using a FABM. The following describes the most prevalent conditions that affect women, and the signals indicating medical care.

Irregular cycles are easily identified through FABMs. Irregular cycles are common for two, or three years following menarche, after childbirth or breastfeeding and in women nearing menopause. The same group of women and any woman going through stressful situations may have anovulatory cycles (without ovulation). This is identified when the waking body temperature is constant throughout the cycle revealing a monophasic pattern. If there is no expulsion of an ovum from the ovary, the corpus luteum is not formed, progesterone will not be released hence the temperature cannot rise. In anovulatory cycles, the body still produces some oestrogen for endometrial growth and a drop in this hormone will still cause some vaginal bleeding. This anovulatory bleeding is often referred to as a light period. Those who do not monitor their cycle might even be misled, thinking they are privileged to have a scant flow. Anovulatory bleeding may also be the result of excessive exercise, obesity, dieting, severe stress, thyroid problems, and polycystic ovarian syndrome (PCOS).¹¹ Repeated anovulatory cycles and/or irregular bleeding patterns call for further investigations.

Abnormal reproductive tract bleeding can be easily recognised by FABM users. It is normal for some women to have some spotting or light bleeding around peak day. Deviations from the normal include menses lasting more than seven days, menses with identified clots, immense pelvic and or abdominal pain, and intermenstrual bleeding,

¹⁰ Knight, *The Complete Guide to Fertility Awareness*, 205-216; Hilgers, *The Medical and Surgical Practice of NaProTechnology*, 259-275.

¹¹ Knight, *The Complete Guide to Fertility Awareness*, 206.

that is bleeding occurring during the cycle apart from menses. Abnormal bleeding may be significant of other conditions because it can originate in any part of the reproductive tract and not just the uterus. For instance, post coital bleeding may be due to a cervical ectropion. In any circumstance, those who experience intermenstrual bleeding must seek medical advice.

Premenstrual syndrome (PMS) is a common condition among women of reproductive age. Its negative effects on the physical, psychological, and behavioural aspects of a woman may interfere with her everyday life causing even more distress. This syndrome is most likely to appear during the luteal phase, that is just after ovulation. PMS is related to high progesterone levels that cause a higher than usual waking temperature throughout the cycle. The shift in temperature after ovulation is commonly greater than 0.2°C.¹² Women who log their cycle can anticipate the onset of some PMS signs through their chart and can to a certain extent prepare themselves for the 'cranky days'. Others noticing severe signs should seek professional support.

Ovarian cysts are quite common in women and rarely pose a serious health problem. The cysts can remain inactive or release a fair amount of oestrogen that causes a fertile type of mucus and a delayed peak day. Cycles may also be monophasic, whilst cycle length may remain unchanged, become longer or shorter.¹³ Cysts may become painful enough to cause discomfort. The recognition of such cycle patterns together accompanied by pain may be indicative of an ovarian cyst that requires medical or surgical treatment.

Polycystic Ovarian Syndrome (PCOS) is an endocrine disorder that affects up to 15% of women of reproductive age. Women with PCOS have unstable oestrogen levels that affect the production of cervical secretion and ovulation making it a common cause of infertility. Early signs of PCOS are irregular cycles, anovulatory cycles or oligoovulation (ovulation occurring less than eight times a year). Women suffering from PCOS will see that the quantity of mucus is at times less than normal but still have a spinnbarkeit effect. Another significant sign is that the fertile mucus does not coincide with ovulation.

¹² Knight, *The Complete Guide to Fertility Awareness*, 206.

¹³ *Ibid.*

When FABM users notice the changes in cervical mucus, monophasic patterns, and/or long cycles with repeated episodes of cervical secretions, they are alerted to communicate with a fertility awareness practitioner for accurate interpretation and to seek medical advice. Timely treatment for PCOS lowers the risk of infertility.

Endometriosis is a distressing chronic condition that causes pelvic pain. Endometriosis is characterized by the growth of endometrial cells outside the uterus. These growths can appear on the fallopian tubes, bladder or bowel. Being endometrial tissue, it responds to hormone stimulation and bleeds just like the uterine endometrial layer sheds during menses. This is a type of internal bleeding that accumulates, causing chronic inflammation and possible adhesions. Endometriosis causes several symptoms depending on its site and severity; these include painful periods, lower back pain, generalised pelvic pain, pain on exercise, pain on intercourse, pain on micturition and defecation and some women also complain of general fatigue. Premenstrual spotting longer than two days can also predict endometriosis. Whilst evidence of the waking temperature as a predictor of endometriosis is limited, a US study showed that out of 168 recorded cycles of women laparoscopically diagnosed with endometriosis, 65% showed an elevated waking temperature with one or more temperature spikes in the follicular phase. Some women also show a short luteal phase while others have monophasic cycles.¹⁴ Researchers of a German study noted a temperature of more than 36.6°C during the first three days of menstruation in women laparoscopically diagnosed with endometriosis.¹⁵ Though these observations may lead one to suspect the presence of endometriosis, it is only through a laparoscopy that the condition is definitively diagnosed.

Premature ovarian insufficiency (POI) refers to a state where a lack of oestrogen inhibits follicular growth and ovulation. The cessation of ovarian function causes cycle changes. FABM users might notice that besides having cycles shorter than 24 days, the length of menstruation and the quantity of blood loss also change. Other signs include a short

¹⁴ Knight, *The Complete Guide to Fertility Awareness*, 216.

¹⁵ Sunji Chai and Robert A. Wild, "Basal Body Temperature and Endometriosis," *Fertility and Sterility* 54 no.6, 1990: 1028 – 1031, <https://www.sciencedirect.com/science/article/abs/pii/S001502821654000X>.

luteal phase, a reduced amount in cervical secretion, more dry days, and monophasic cycles. POI leads to early menopause, that is before the age of 40. This brings much distress when diagnosed in women who attempt to have their first baby at 35 or later, and do not manage to conceive. It is also a cause of infertility in otherwise fertile women. Cyclic changes and/or menopausal symptoms require medical consultation especially for women who wish to conceive.

Hyperprolactinemia refers to a state of breast milk secretion unrelated to breastfeeding (galactorrhoea). High prolactin levels are considered normal only during pregnancy and breastfeeding. Stress is a major cause of hyperprolactinemia; PCOS and thyroid disorders may also cause high levels of prolactin. Hyperprolactinemia causes irregular cycles, absent menstruation, a significant delay in the temperature shift and/or a short luteal phase, all signs indicating the need for medical intervention to prevent potential fertility problems.

Thyroid dysfunction is another condition that can be traced through cycle tracking. The thyroid gland is responsible for metabolism; an overactive thyroid speeds metabolism and an underactive thyroid slows it down. Thyroid hormones work with the follicle stimulating hormone and luteinizing hormone, both important for a regular menstrual cycle. Thyroid dysfunction might not affect fertility, but early diagnosis is beneficial to a woman's future health. Recorded fertility indicators in women with a low thyroid function will exhibit infrequent or too frequent periods, longer bleeding days, anovulatory cycles and an abnormally low waking temperature. On the other hand, a hyperactive thyroid, may cause amenorrhea (no menses), anovulatory cycles, irregular cycles, very light periods, and an unusually high waking temperature.

Abnormal vaginal discharge can be caused by fungal or bacterial infections. It is quite common for women who do not observe their menstrual cycle to worry about noticing profuse secretions, only to be told it is normal. It is just as common for women to ignore abnormal discharge assuming that it is natural to them. An FABM user can distinguish normal white, opaque, or transparent, odourless cervical secretion from abnormal discharge that is different in texture, colour, and odour. An abnormal discharge may also be related to other serious conditions such as acute salpingitis.

As seen, a woman who uses a FABM can present valuable information prospectively when she goes to her doctor. She can state her concern and give the reason for her visit based on what she recognises to be unusual and worrying according to her recorded cycles. This highlights the ethical advantage that women who understand how their body works, are empowered to be active participants in diagnosing pathologies and planning treatment.

Another ethical advantage in this regard is the fact that FABMs are non-invasive. They do not include chemical agents or devices that could cause side effects which interfere with the evidence of pathological conditions. Hence, the interest in FABMs as alternative to hormonal contraception has increased among women who worry over the negative effect contraceptives have on the body and on the environment.¹⁶

2.2.3 Treating irregularities

By far, the practice of FABMs is a tool that provides medical practitioners with more information about their patient's health that leads to a better evaluation and treatment plan. Furthermore, regular charting starting from adolescence, contributes to early detection of common problems, and targeted treatment. Yet, a woman prompted to seek medical advice on grounds of her cycle observations, cannot just go to any doctor and present a properly filled chart or app. Only physicians with adequate knowledge and skills can assist in the diagnosis and treatment of suspected conditions through FABM charting. These medical practitioners show further interest in the field of female reproductive health either because they question modern trends of care and/or because they have ethical objections to the type of care generally provided.

The following are two examples of comprehensive systems that, apart from relying on developments in medical technology, give great importance to the lifestyle of the individual and information gathered by means of FABMs. Furthermore, they offer an alternative to the contraceptive pill which is commonly prescribed to adolescents to treat conditions such as acne, irregular cycles, and very painful periods among others.

¹⁶ Shannon Roberts, "The Rise and Rise of Natural Family Planning," *MercatorNet*, April 26, 2016, <https://mercatornet.com/the-rise-and-rise-of-natural-family-planning/20575/>.

Although contraceptive treatment is rightfully prescribed to treat some pathological conditions, it can possibly cause the symptoms to subside and leave the root cause untreated. Besides, the adverse effect of the contraceptive use in adolescents must not be overlooked. Research shows that the mental faculties of young girls' brains are still under development in adolescence. Steroids and other hormones can interfere with the adequate development and consequently lead to mental related problems in adulthood.¹⁷

Natural Procreative Technology (NPT or NaProtechnology) is a women's health science that cooperates with the woman's menstrual and fertility cycles to identify and treat the problems and underlying causes women so often experience.¹⁸ It focuses on providing education in the use of the Creighton Model Fertilitycare System (CrMS) as a FABM to women so they can become more aware of their fertility and actively participate in a personalised plan of care that includes changes in lifestyle as necessary. It was also created to help couples plan and space the number of children. NPT was introduced in the US in 1980 by obstetrician-gynaecologist Thomas Hilgers who understood that it was necessary to challenge the paradigm shift towards contraception. This fertility-care based medical approach is the fruit of decades of research and practice.

The application and effectiveness of NPT relies on the consistent observation obtained from CrMS, the accurate charting and the use of modern medical technology such as hormone profiling and treatment, ultrasounds, and microsurgical interventions. With CrMS women have an accumulation of data about the menstrual cycles that is valuable for proper evaluation. This allows the clinician to target treatment to the underlying cause as opposed to the prescribing of treatment to eliminate symptoms.

Besides being useful for reproductive health monitoring and gynaecologic health maintenance, the ethical value of NPT lies in the fact that it treats the woman as a whole.

¹⁷ Pilar Vigil et al., "Influence of Sex Steroid Hormones on the Adolescent Brain and Behavior: An Update," *The Linacre Quarterly* 83, no. 3 (2016): 308-329, Doi: 10.1080/00243639.2016.1211863.

¹⁸ Shirley González, "The Menstrual Cycle as a Vital Sign: The Use of Naprotechnology in the Evaluation and Management of Abnormal Vaginal Bleeding and PCOS in the Adolescent." *Issues in Law & Medicine* 32, no. 2 (2017): 277-286, accessed September 22, <https://search-proquestcom.ejournals.um.edu.mt/docview/1943043836?OpenUrlRefId=info:xri/sid:primo&accountid=27934>.

NPT is “at the service of the human person. It not only encourages the female patient to become a partner in the evaluation and treatment of her reproductive health, but such participation is an actual component of the approach.”¹⁹

Fertility Education and Medical Management (FEMM) is another comprehensive women’s health program based on peer-reviewed ground-breaking research in women’s endocrinology carried out by the Reproductive Health Research Institute (RHRI) in Santiago, Chile. FEMM’s priority is to educate adolescents and women. It teaches them how to monitor and observe the fertility indicators through a FABM, how these natural biomarkers are affected by fluctuating hormones, and how the menstrual cycle is linked to general health. Adolescents and women learn to understand their bodies better, identify normal and abnormal patterns of their reproductive function, and seek medical assistance as informed participants.

The fertility indicators specific to FEMM are the bleeding, the quality of cervical mucus, and the dry days. These are regularly checked and charted using a colour coded system. Women using FEMM also check their urine using dipsticks for the presence of luteinizing hormone and oestrogen which indicate ovulation. They also note physical symptoms such as bloating, cramps, headaches, insomnia, mood swings, and crying spells. FEMM considers these otherwise ignored symptoms as very relevant because some women experience one or more of these symptoms at some point along their cycle. Additionally, FEMM takes into consideration the general lifestyle of the individual that greatly affects the hormonal system. Taking note of any medications is also recommended because of the effect some medicines have on hormones and consequently on the cycle pattern. FEMM provides a digital application to make logging easier and more accessible.

From the headquarters in New York, the FEMM team works closely with the RHRI to provide medical protocols based on past and current clinical research.²⁰ The FEMM protocols involve the evaluation of women’s observations and medical investigations that are important to accurately diagnose, treat and correct conditions of the

¹⁹ Hilgers, *The Medical and Surgical Practice of NaProtechnology*, 23.

²⁰ Fertility Awareness and Medical Management, <https://femmhealth.org/about-us/what-is-femm/>.

reproductive tract and other related problems, not only by managing or suppressing the symptoms, but most importantly by seeking to reveal their underlying cause.

The application and success of both NPT and FEMM in treating irregularities depends on the accurate use of FABMs, particularly in the observation of the quantity and quality of cervical mucus. Both approaches can be applied to diagnose, correct, and treat various conditions like ovulatory dysfunction, polycystic ovaries, thyroid problems, endometriosis, subfertility, infertility, menopausal disorders, depression and other related problems.

Sometimes, couples go through a period of subfertility, that is a prolonged span of time for a woman to become pregnant. A couple's lack of sufficient fertility knowledge can at times contribute to future fertility problems. For instance, some couples planning to achieve a pregnancy assume that the most fertile time is around day 14 of the cycle so they engage in frequent intercourse between days 10 to 16 and most likely reduce intercourse from then on. Yet, if that cycle were to be 33 days long, peak fertility would have occurred around day 20, showing that sexual intercourse between days 10 to 16 is wrongly timed. Such errors can be eliminated with accurate fertility awareness education.²¹

With regards to infertility, that is defined as failure to achieve a pregnancy after a year or more of regular unprotected sexual intercourse, NPT and FEMM apply protocols to investigate, identify and treat a major or underlying condition causing the infertility. Some couples go through the stressful experience of unexplained infertility, and because stressors also play a role in the hormonal interplay, conception may take even longer to happen. This could also occur with couples who wish to have more children. NPT and FEMM offer a holistic approach to try and surpass such difficulties, and research shows that both methods have been successful in assisting couples to achieve a much-awaited pregnancy. Yet, after having applied appropriate protocols and exhausting all measures, it is possible for a couple to remain childless or for a couple not to have more children.

²¹ Christian Gnath et al., "Definition and Prevalence of Subfertility and Infertility," *Human Reproduction* 20, no. 5 (2005): 1144–1147, <https://doi.org/10.1093/humrep/deh870>.

Furthermore, NPT and FEMM are “not an option for couples with azoospermia, ovarian failure, or bilateral fallopian tube occlusion.”²²

NPT and FEMM are committed to improving women’s general health, while maintaining the human ecology and sustaining the procreative potential. Other ethical advantages include the use of minimal invasive procedures as part of their treatment and the availability and suitability of the methods for all women regardless of age.

As stated, these systems of care can only be carried out by appropriately trained practitioners. Medical education courses to specialise in NPT are conducted annually at the Pope Paul VI Institute for the Study of Human Reproduction, affiliated with Creighton University School of Medicine, in Omaha, Nebraska.²³ FEMM on the other hand offers two types of in-depth courses intended for physicians to train in medical management of women’s health, and FEMM teachers who will then be qualified to teach women how to observe and log the information. They also offer a FEMM Teen course that covers pedagogical aspects to train teachers dealing with teen participants. FEMM offers online courses and requires all its members to follow courses every two years to keep abreast with new research and protocols.²⁴ Both NPT and FEMM are expanding their services across the US, Europe, and Australia.

This section has shown the ethical advantages of FABMs within the realm of women’s health. It showed that FABMs are highly beneficial for adolescents and women to monitor their health “from relatively simple observations.”²⁵ It also explained how reproductive disorders can be identified through FABMs and treated through NPT and FEMM protocols thus significantly lowering the risks of other health conditions and

²² Joseph B. Stanford, Tracey A. Parnell, and Phil C. Boyle, “Outcomes from Treatment of Infertility with Natural Procreative Technology in an Irish General Practice,” *Journal of the American Board of Family Medicine* 21, no. 5 (2008): 382, <https://www.jabfm.org/content/21/5/375>.

²³ Elizabeth Tham, Karen Schliep, and Joseph Stanford. “Natural Procreative Technology for Infertility and Recurrent Miscarriage Outcomes in a Canadian Family Practice.” *Canadian Family Physician* 58, no. 5 (2012): 269, https://www.researchgate.net/publication/228069159_Natural_procreative_technology_for_infertility_and_recurrent_miscarriage_Outcomes_in_a_Canadian_family_practice#fullTextFileContent.

²⁴ Fertility Awareness and Medical Management, <https://femmhealth.org/about-us/what-is-femm/>.

²⁵ Boyle, Neo Fertility, Advanced Fertility Care Through Cycle Tracking, 14.

fertility problems.²⁶ These points confirm how, as previously mentioned, considering overall health is ethical in the sense that it promotes integral human flourishing and helps the individual to achieve the highest possible potential.

2.3 FABMs and Responsible Parenthood

This section will discuss several ethical advantages of FABMs in view of family planning. It will show how their use compliments responsible parenthood within long-term monogamous relationships and allows couples to respect the unitive and procreative principle of the conjugal act. It will also explain how FABMs help couples to grow in virtues and in love for each other through mutual respect and communication. These characteristics can be adopted by all individuals, irrespective of status, culture, and creed. References to the Catholic ethical perspective within this section will be made precisely because the Catholic Church recognises their universal significance.

2.3.1 Responsible parenthood

Family planning is central in the life of couples who aspire to have a family. Couples committed to a lifelong relationship are aware of the many challenges tied to parenthood and its obligations. By observing other family members and friends, couples know that apart from the joy children bring, taking care of a family can be taxing on the physical and mental state of the parents. Meeting financial needs of housing, education, healthcare, clothing, daily living, and other out of the blue bills can be exhaustive irrespective of the family's income. This echoes the opening words of the encyclical letter *Humanae Vitae* of Pope Paul VI: “[t]he transmission of human life ... has always been a source of great joy to them, even though it sometimes entails many difficulties and hardships.”²⁷

Some couples postpone a first pregnancy to fulfil a dream, to go on a holiday before being tied down, to pursue an academic and/or professional career or to become financially stable before becoming parents. Limiting the number of children to one, two

²⁶ Vigil et al., “The Importance of Fertility Awareness in the Assessment of a Woman’s Health: A Review,” 79.

²⁷ Paul VI, *Humanae Vitae*, sec. 1.

or maybe three, is commonly thought to be the best way parents could securely see to their children's present and future needs without jeopardizing comforts and commodities. In view of this, family planning presents several ethical issues such as determining when to start a family, the number of children and their spacing, and the grounds on which such decisions are taken. From a Catholic perspective, another important ethical aspect involves the way couples avoid further pregnancies while honouring the intrinsic link between the unitive and procreative dimensions of sexual intercourse between married couples.²⁸ In this light, the question of human procreation needs to be approached with dignity and caution since it

involves more than the limited aspects specific to such disciplines as biology, psychology, demography, or sociology. It is the whole man and the whole mission to which he is called that must be considered: both its natural, earthly aspects and its supernatural, eternal aspects.²⁹

Responsible parenthood is exercised by those who through prayer, dialogue and trust “prudently and generously decide to have more children, and by those who, for serious reasons and with due respect to moral precepts, decide not to have additional children for either a certain or an indefinite period of time.”³⁰ Over time, family planning decisions may alter as couples adjust to new family needs and circumstances.

2.3.2 Planning the family

FABMs provide a distinctive option for those committed couples who wish to plan their family based on joint decision-making in which husband and wife are equals. Husband and wife “approach fertility as a normal biological process and, by synchronizing their sexual behaviour with the normal periodicity of fertility, can plan their families while respecting possible cultural and/or religious beliefs they may have.”³¹

Not every act of sexual intercourse result in a new life. Couples who use FABMs take advantage of the woman's fertility that is ordered in a way that she goes through a fertile

²⁸ Paul VI, *Humanae Vitae*, sec. 12.

²⁹ *Ibid.*, sec. 7.

³⁰ *Ibid.*, sec.10.

³¹ Matthias Unseld et al., “Use Of Natural Family Planning (Nfp) and Its Effect on Couple Relationships and Sexual Satisfaction: A Multi-country Survey of Nfp Users From US And Europe,” *Frontiers in Public Health* 5, no. 42, (2017): 2, doi: 10.3389/fpubh.2017.00042.

and infertile phase during every cycle of her reproductive life. They engage in sexual intercourse during the fertile time to achieve conception and refrain from any genital contact during this time to intentionally avoid conception. In this manner, they exclude any action that either before, at the moment of, or after sexual intercourse, prevents procreation.³² Having said this, even though parents have a right to determine their family size, responsible parents accept a ‘surprise pregnancy’ should this occur and love the child unconditionally.

Abstaining from sexual intercourse during the fertile window to avoid conception is often described as ‘periodic abstinence’. However, Hilgers argues that those who engage in spontaneous intercourse using contraceptives too “practice periodic abstinence since they do abstain from genital intercourse between one sexual contact and the next.”³³ He explains that a couple who decide to either have or not to have intercourse to regulate fertility are in fact applying the ‘principle of selective intercourse’.³⁴ Selective intercourse is of great ethical value because unlike contraceptive measures, it does not impede conception as the man and woman “respect the procreativity of the fertile period by continence at this time.”³⁵

Contrarily, contraceptives are designed with the sole purpose of obstructing the natural development of the generative process and allows couples to engage in intercourse with little responsibility and less restraint.³⁶ Furthermore, the message contraception conveys to couples is that “the potential to procreate is distinct and different from the love between them.”³⁷ The giving of oneself completely in the conjugal act is interrupted when a spouse withholds the aspect of fertility from the other.

The contraceptive industry pushes the idea that the further intention of contraceptive use and of selective intercourse are the same and may be good and justified. Yet,

³² Unsel et al., “Use Of Natural Family Planning,” 16.

³³ Hilgers, *The Medical and Surgical Practice of NaProTechnology*, 23.

³⁴ *Ibid.*

³⁵ Paul Thyra, *The Double-Check Method of Family Planning*, Collegeville, (Minnesota: The Liturgical Press, 1978), 47.

³⁶ Paul VI, *Humanae Vitae*, sec. 16.

³⁷ Nadia Delicata, “Revisiting Humanae Vitae Fifty Years Later,” *Strong Families – Strong Societies*, (Kraków: The Pontifical University of John Paul II in Krakow Press, 2019) 60.

contraceptive intercourse is different from abstinence during the fertile period because of the kind of intentional action carried out. Elizabeth Anscombe explains how contraceptive intercourse “is not left by [the couple] as the kind of act by which life is transmitted, but is purposely rendered infertile, and so changed to another sort of act altogether.”³⁸ On the other hand, the act of ordinary sexual intercourse at an infertile time is unchanged and remains a “perfectly ordinary act of intercourse.”³⁹

Another advantage of FABMs in family planning is that they respect and fulfil the right to sexual and reproductive health that is a “key aspect of women’s right to health.”⁴⁰ According to the World Health Organisation (WHO), reproductive rights entail three basic components: “the freedom to decide whether, when and how many children to have; the right to modern family planning information and modern family planning methods; the right to control one’s own sexuality.”⁴¹ FABMs fulfil these reproductive rights with utmost respect to the general welfare of the woman and offer ethical advantages to all women during the reproductive stage of life. Apart from helping couples to achieve a pregnancy more quickly, and enhancing the possibility of motherhood to those who struggle to conceive, with the use of FABMs couples can exercise their right to plan and limit their family size and to avoid a pregnancy without causing any adverse effects on future fertility. With regard to the right to modern family planning information and modern family planning methods, FABMs practitioners offer guidance and sound medical knowledge based on the latest scientific research, as part of an informed choice for successful family planning. As to the right to control one’s own sexuality, FABMs give women the knowledge to live in harmony with their body in a way that does not interfere with their natural cycle. Indeed, as stated previously, women using FABMs can place their menstrual cycle in the context of their overall health⁴² and through logged observations can identify menstrual irregularities and other

³⁸ Elizabeth Anscombe, *Contraception & Chastity* (London: Catholic Truth Society, 2003),30.

³⁹ *Ibid.*

⁴⁰ Office of the United Nations High Commissioner for Human Rights and the World Health Organization *The Right to Health, Fact Sheet no.31*,13.

⁴¹ Alex Mauron, “Ethical Aspects of Reproductive Health,” *Geneva Foundation for Medical Education and Research* https://www.gfmer.ch/Endo/Lectures_08/ethical_aspects_of_reproductive_health.htm

⁴² Weschler, *Taking Charge of Your Fertility*, 21.

dysfunctional conditions before they even exist.⁴³ Additionally, FABMs offer the possibility for a couple to transition from avoiding to achieving pregnancy as soon as they discern a change in pregnancy intentions. Regardless of these advantages, fertility awareness and FABMs are never mentioned in the thirty-four-page set of guidelines and recommendations on the provision of contraceptives to ensure human rights issued by the WHO in 2014.⁴⁴ Neither are they mentioned in the document to empower women through the access of contraception published by the Council of Europe in 2019.⁴⁵

2.3.3 Sustaining relationships

A further ethical advantage of the use of FABMs is that it sustains relationships by increasing communication and mutual respect between a couple. Each cycle promotes a discussion between husband and wife on whether to have more children. As family planning goals are reviewed, a more in-depth sharing of mind and heart is possible. FABMs can also promote conversations about sexual desires that a couple should never be ashamed to share. The couple grows in mutual respect when, strongly believing that it will be better for their family to avoid conception, they agree that the decision to abstain on fertile days outweighs the longing for physical union. Where there is mutual goodwill, selective intercourse will eventually become a liveable act of love and the wait can then unfold as the couple uses the infertile periods for sexual intimacy. It is commonly assumed that men have a stronger sexual desire than females and find it harder than woman to abstain from intercourse. This may be the reason some women feel they ought to use some form of contraception thus making sexual intercourse readily available. However, when a couple uses a FABM, they are open to conversation and the man becomes actively involved in cycle interpretation, making the decision of selective intercourse a team decision. Though abstaining from sexual intercourse for

⁴³ Boyle, *Neo Fertility, Advanced Fertility Care Through Cycle Tracking*, 25.

⁴⁴ World Health Organisation, *Ensuring Human Rights in The Provision of Contraceptive Information and Services*,
file:///C:/Users/SMSB0114/Desktop/OneDrive/0%20Dissertation/Chpter%202/9789241506748_eng.pdf.

⁴⁵ Council of Europe, *Empowering women: promoting access to contraception in Europe* Parliamentary Assembly Committee on Equality and Non-Discrimination, 2019.
<http://www.assembly.coe.int/LifeRay/EGA/Pdf/TextesProvisoires/2019/201912046-autonomiserfemmes-contraception-EN.pdf>.

some days can be very challenging, it is very possible, and the relationship need not suffer. On the contrary, this presents opportunities to couples to discover other ways to show love. "In doing this, they certainly give proof of a true and authentic love"⁴⁶ where spouses are not only pleased about loving each other, but they also experience the joy of being loved. Moreover, FABMs helps the couple to grow in total self-giving as they do not create any 'physical barriers' between them during intercourse. This mutual love is what moves a couple to grow in communication, appreciation, respect, self-giving and fidelity.

2.3.4 Growing in virtues

The consistent use of FABMs and the practice of selective intercourse in marriage becomes a lifestyle adopted by the couple who freely chooses to live a chaste life. It takes a virtuous couple to consistently practice FABMs and incorporate it in their lifestyle because a sustained habit of acting right becomes a personality trait. Virtues are commonly defined as traits or qualities that are deemed to be morally good and thus are valued as a foundation of principle and good moral being. Virtues makes one think act and feel in moral excellent ways. Kindness, patience, justice, compassion, humility, modesty, and justice are but a few of the many virtuous characteristics one may observe in a virtuous person. With the consistent use of FABMs, the couple enters a virtuous cycle as the same lifestyle they embrace helps them to further grow in virtue.⁴⁷ While mutual goodwill and respect are necessary for the effective practice of a FABM, the same practice leads the couple to further show mutual goodwill and respect.

The couple that uses FABMs expresses and grows in the virtue of love. Authentic conjugal love is strengthened between the couple because FABMs create a selfless bond where couples express their love as they become more sensitive to each other's needs.

The couple also experiences the virtuous cycle intrinsic to other virtues. Prudence is expressed when the couple discern and responsibly decide their family size depending on their circumstances. Couples who use FABMs grow in fortitude, as they persevere in

⁴⁶ Paul VI, *Humanae Vitae*, sec. 16.

⁴⁷ Nafsika Athanassoulis, "Virtue Ethics," *Internet Encyclopaedia of Philosophy*.
<http://www.iep.utm.edu/v/virtue.htm>.

using the method over a stretch of time and bravely go against the flow of the contemporary contraceptive culture. The couple seeking that which is right reflects the virtue of justice, even in their daily life by expressing mutual respect.

Temperance requires patience and self-control. This noble virtue is practiced by couples as they abstain from sexual intercourse during the fertile period, notwithstanding their feelings, urges and emotions. Abstinence does not just happen and can be difficult for the couple. It will, however, help them grow in self-mastery, the practice of which empowers them to face other more challenging and serious situations. Postpartum recovery, illnesses, exhaustion, and work that keeps a spouse away for a considerable amount of time require temperance and the kind of marital love that puts the well-being of the beloved before any personal desires.

2.4 Other Ethical Advantages of FABMs

Other ethical advantages of FABMs are related to their accessibility and pro-life dimension. They can be taught to anyone without distinction because they do not incur a monetary burden since there is little to purchase; they are easy to learn and use even by those who are not academically accomplished because the basic symptoms are within the body. They can also be offered in different ways and different settings other than the health system.⁴⁸

In itself, every fertility-awareness method is “free of any primary or secondary abortifacient effect making it ethically acceptable in all cultural, ethnic, and religious contexts.”⁴⁹ Moreover, when used outside of or prior to marriage, “[t]racking of fertility patterns joined to discussion of their meaning correlates positively with maintaining virginity as well as a return to chastity.”⁵⁰ In this sense, FABMs have been observed to encourage, maintain and/or restore the single-partner principle through stable sexual

⁴⁸ Vatican Statement, “Ethics and Human Values in Family Planning,” *International Review* 12, no.2 (1988): 101.

⁴⁹ *Ibid.*, 100.

⁵⁰ Hanna Klaus, Nora Dennehy, and Jean Turnbull, “Undergirding Abstinence Within a Sexuality Education Program,” *Teen STAR USA, Sexuality Teaching in the Context of Adult Responsibility* Teen Pregnancy Prevention Conference, Pennsylvania State University, State College, PA, October 21, 2004, <https://teenstar.org/undergirding-abstinence-within-a-sexuality-education-program/>.

relationships. Through the presentation of FABMs as part of a comprehensive approach to an integrated sexuality, and the promotion of abstinence and its advantages, it is possible to empower individuals to think wisely before engaging in sexual activity. Responsible sexual behaviour lessens the frequency of sexually transmitted diseases, reduce the chances of unintended pregnancies and as a result can reduce the number of abortions.

A further ethical advantage concerns economy and ecology. A widespread practice of FABMs would reduce the expenditure and resources presently directed towards medical products and technology related to contraception, fertility and gynaecological health.

2.5 Conclusion

“The understanding of how the body works is a great act of self-discovery”⁵¹ that benefits adolescents, women, their families and subsequently society. Of course, individuals are all different and FABMs bring out the uniqueness of women and “demystify [their] bodies without destroying their natural beauty.”⁵²

This chapter has shown the ethical advantages of FA and FABMs have on women’s health and responsible parenthood. It revealed how by appreciating the natural signs of fertility, women and physicians trained in these methods can detect and treat underlying reproductive health issues early. It also affirmed that FABM use in married life depends on cooperation and communication between husband and wife.

In addition, this chapter explained how FABMs are true methods of family planning because couples can use the method to either achieve or avoid pregnancy. The chapter also referred to the communication and cooperation between husband and wife as important components for the successful use of FABMs, which enriches the marital relationship of the couples and enhances their virtuous life.

⁵¹ Robert Colquhoun, *An Introduction to Natural Fertility Awareness*, Location 74, Kindle Edition.

⁵² Ana Maria Dumitru, “Fertility Awareness-Based Family Planning: Good for Both Body and Soul,” Mercatornet, March 30, 2017, <https://mercatornet.com/fertility-awareness-based-family-planninggood-for-both-body-and-soul/8276/> accessed on May 10, 2020.

Chapter 3

FABMs in Malta

3.1 Introduction

The third chapter will present and discuss the situation in Malta and Gozo with regard to the accessibility, availability, promotion and practice of FABMs, NPT and FEMM, referring to available published and unpublished data. This discussion will be framed within the context of Malta's 'Catholic' heritage. The chapter will proceed to investigate why the promotion and practice of FABMs is not very popular locally.

3.2 Malta's Catholic Heritage

The Maltese Catholic heritage is very important for the discussion of the situation in Malta and Gozo regarding the practice of FABMs, NPT and FEMM. This is because the Catholic Church was the first to introduce the rudimentary forms of FA in Malta and continues to promote the new improved FABMs.

Christianity in Malta, which dates back to 60 AD, "remained influential throughout all periods of Maltese history in constructing a meaning and identity."¹ Throughout the centuries, the Maltese remained steadfast in their faith and the Roman Catholic Church remained central in their life. so much so that the Church influenced the everyday life of the Maltese. Gellel and Sultana observe that

[w]ith its capillary network in towns, villages and hamlets, the Church assured itself that it could care for the physical, social, political, and spiritual needs of the individuals. Throughout the nineteenth and twentieth century, the Church secured its social action through the foundation of numerous homes and institutions for specific needs and through the consolidation of local festas and other cultural activities.²

¹ Adrian Gellel and Mark Sultana, "Leaping from non-secular to post-secular. A study of the Maltese scenario," in *Europe as a Postsecular Society: Reflections on Religion and Societal Cohesion* eds. Hans-Georg Ziebertz and U. Riegle (Berlin: Lit Verlag, 2008), 111.

² *Ibid.*, 113.

When Pope John Paul II visited Malta and Gozo in May 1990, he praised the Maltese for their uncompromising defence of the Christian faith throughout history and urged them to contribute to the spiritual unity of Europe by offering their treasures of Christian values.³

Nonetheless, the last decades witnessed an immense cultural change. The Maltese were travelling far and wide and were being exposed to new different ideas, and to higher standards of living and education. This had a huge impact on the longstanding values harboured by the Maltese as evident in various surveys conducted by sociologist Anthony M Abela.

In the mid-1990s, Abela compared the results of the 1983 and 1991 European Value Systems surveys held in Malta and other European countries. Among other findings, he observed that in 1991, 95% of the Maltese still gave importance to religious marriage. Most of the Maltese, 76%, were firm in their idea that individuals should be free to engage in sexual relationships without restrictions, whereas only 34% of the Italian neighbours opposed this idea. When asked to identify what made a marriage successful, the Maltese gave great importance to the interpersonal qualities of faithfulness (93%), mutual respect (84%) and understanding (84%). When it came to priorities, 60% of the Maltese (10% less than in 1983) gave pride of place to religious beliefs, while for 64% of Europeans, sexual relationships were a priority. The study also revealed that 65% of the Maltese thought having children was a 'very' important component of marriage while 23% considered it only 'rather' important. From these surveys, Abela concluded that the Maltese had retained an extremely strict sexual and family morality and that this was linked to the presence of the Church. In fact, 85% of the Maltese thought that the Church was giving adequate answers to family issues and it was proper for the Church to speak on such morals. One has to keep in mind that in 1983, the population's confidence in the Church stood at 84.2%, making it the most trusted institution in Malta, ahead of the

³ Mass for The Faithful of The Archdiocese of Malta, *Homily of His Holiness John Paul II* Sunday 27 May 1990 section 4, http://www.vatican.va/content/john-paul-ii/en/homilies/1990/documents/hf_jpii_hom_19900527_floriana.html.

educational system (73%), Parliament (44.1%) and the Judiciary system (44%).⁴ In 1995, Abela repeated the values survey. He observed that “the greatest majority of respondents in Malta were found to belong to the Roman Catholic Church and to hold high levels of traditional belief.”⁵ However, he found the result to “posit the rise of individualised values in Maltese society” especially amongst higher educated young professional adults. They favoured a more permissive and individualised morality, possibly less grounded in natural law and reason, and much more emotivist. Abela also noted “a decline in the social significance of the teaching authority of the Church.”⁶ Following another study in 2001, Abela confirmed that while Malta embraced “a predominant Catholic family culture”,⁷ there was a “shift in the values of the family [and] the secularization of sexuality.”⁸

In 2004, Malta became a member of the European Union, resulting in an increase of foreign permanent residents who brought with them different ideas and religious views. In 2011, the Maltese voted in favour of divorce in a referendum and in the following years, Parliament approved laws that gave same-sex couples equal rights with regard to marriage, adoption of children and in vitro fertilisation. In the meantime, the number of people attending Sunday Mass, especially teenagers and young adults, declined drastically. In 2017, the rate of regular attendance was estimated to be 36.1%, in contrast to 52.6% in 2005, 63.4% in 1995 and 75.1% in 1982.⁹ A survey conducted among a random sample of 1000 respondents in 2017 provided interesting data.¹⁰ It shows that

⁴ Anthony M. Abela, *Shifting Family Values in Malta. A western European Perspective* (Malta: Media Centre, 1994), 1-41.

⁵ Anthony M. Abela. *Shifting values in Malta and Western Europe*. *Melita Theologica*, 48, no.2 (1997), 23.

⁶ *Ibid.*, 33.

⁷ Anthony M. Abela *Who Wants Divorce?: Marriage Values and Divorce in Malta and Western Europe* *International Review of Sociology / Revue Internationale de Sociologie*, 11, no. 1, (2001) 75.

⁸ *Ibid.*, 85.

⁹ Archdiocese of Malta, *Malta: Sunday Mass Attendance, Census 2017* (Floriana : Discern - Institute for Research on the Signs of the Times, 2018).

¹⁰ Archdiocese of Malta, *Faith and Church Attendance Report*. A Misco International Report, 15 January 2018, https://knisja.mt/files/article/FAITH_AND_CHURCH_ATTENDANCE_SURVEY_REPORT.154868985201.pdf.

95% said they believe in God, 61% considered religion to be very important and 50% answered that they attend Sunday Mass. Over the years, there was a downturn in Church weddings and a steady increase in civil ceremonies. For example, in 2010 there were 1,547 Catholic weddings and 740 civil weddings, while in 2018, there were 1,129 church weddings and 1,423 civil weddings.¹¹ In public schools, religious instruction in Roman Catholicism became optional. In 2014, Ethics as a subject was created for those who chose not to attend Religion lessons. In the same year, 1,411 students preferred Ethics to Religion and by 2019 the number escalated to 3,422, an increase of 142%.¹²

The relation between values and secularity is not clear cut. Paradoxically, despite this wave of secularisation and the undeniable constant decline of regular churchgoers, Malta is still considered a 'Catholic' nation. Most of the Maltese prefer to hold "religious services to mark the birth of a child, marriage or a death in the family"¹³ even if these are the only times when they enter church. The clergy still holds a prominent role among those needing help. When seeking relationship support the Maltese seek help from priests and religious persons (29.1%), marriage counsellors or family therapists (21.6%), relatives and friends (11%).¹⁴ This is also evident in the way parishioners approach respective parish priests for help and advice. The village festas are another example of how the Catholic culture is still ingrained. Convinced of their beliefs or not, people gather to celebrate and venerate the patron saint and year after year, they participate in this "external manifestation of religion."¹⁵ Religious practice, family traditions and

¹¹ Christopher Scicluna, "Number of marriage separations outnumber Church weddings in 2018," *Times of Malta* January 28, 2019, <https://timesofmalta.com/articles/view/number-of-marriageseparations-outnumber-church-weddings-in-2018.700505>.

¹² James Debono, "More students opt out of religion classes in school, 142% increase since 2014," *Malta Today* February 6, 2019, https://www.maltatoday.com.mt/news/national/92738/more_students_opt_out_of_religion_classes_in_school_142_increase_since_2014#.XvddwS2Q1QJ.

¹³ Abela, *Shifting Values in Malta and Western Europe*, 23.

¹⁴ Suzanne Piscopo, Sue Vella, and Angela Abela, "Couple Relationships in Mediterranean Malta," in *Couple Relationships in a Global Context*, European Family Therapy Association Series. The National Centre for Family Research, *Sustaining Relationships: Couples and Singles in a Changing Society*, Attard (2016): 31-32.

¹⁵ Anthony M. Abela. *Shifting Values in Malta and Western Europe*. *Melita Theologica*, 48, no.2 (1997), 23.

customs are somehow woven culturally, but do not necessarily reflect one's faith, moral or ethical life.

3.3 The Use of FABMs in Catholic Malta

As previously mentioned, the Catholic Church in Malta became powerful over the years and her role in society extended beyond the provision and guidance of spiritual care. It even "permeated to the social aspects of sexuality practiced within the community."¹⁶

The results of a survey carried out among married couples in Malta in the late 1950s revealed that though 82% knew of the Rhythm Method, only 27% knew how to use it.¹⁷

This clearly signalled the need for reproductive education. In 1952, Charles Vella, then a young seminarian, had already conducted the first course in preparation for marriage.

The success of these courses led the local Catholic Church to broaden the social action it had already established. In 1956 it opened the Cana Movement with the aim to help couples to prepare for marriage, and provide support to the already married couples by offering counselling and other family-related services.¹⁸

Members of the Cana Movement included doctors, nurses, midwives and teachers among other professionals; holding the well-being of the family at heart, they willingly offered their time and expertise.

The Cana Movement, which has been for a long time affiliated with the European Institute for Family Life Education, quickly gained a good reputation, even more so because its services were free of charge and therefore were available to everyone including those coming from a low income group.

In 1962, the Movement introduced family planning clinics and published information booklets on the rhythm method. In the first two years of operation, these clinics dealt with over 1,325 cases.¹⁹

The marriage preparation courses (MPC) run by the Movement became increasingly popular and eventually were offered to engaged couples by most parishes. These courses, that cover several topics, are still being conducted for couples preparing for

The marriage preparation courses (MPC) run by the Movement became increasingly popular and eventually were offered to engaged couples by most parishes. These courses, that cover several topics, are still being conducted for couples preparing for

¹⁶ Charles Savona Ventura, "Contraception use in Malta," *Malta Medical Journal* 24, no.2 (2012): 27.

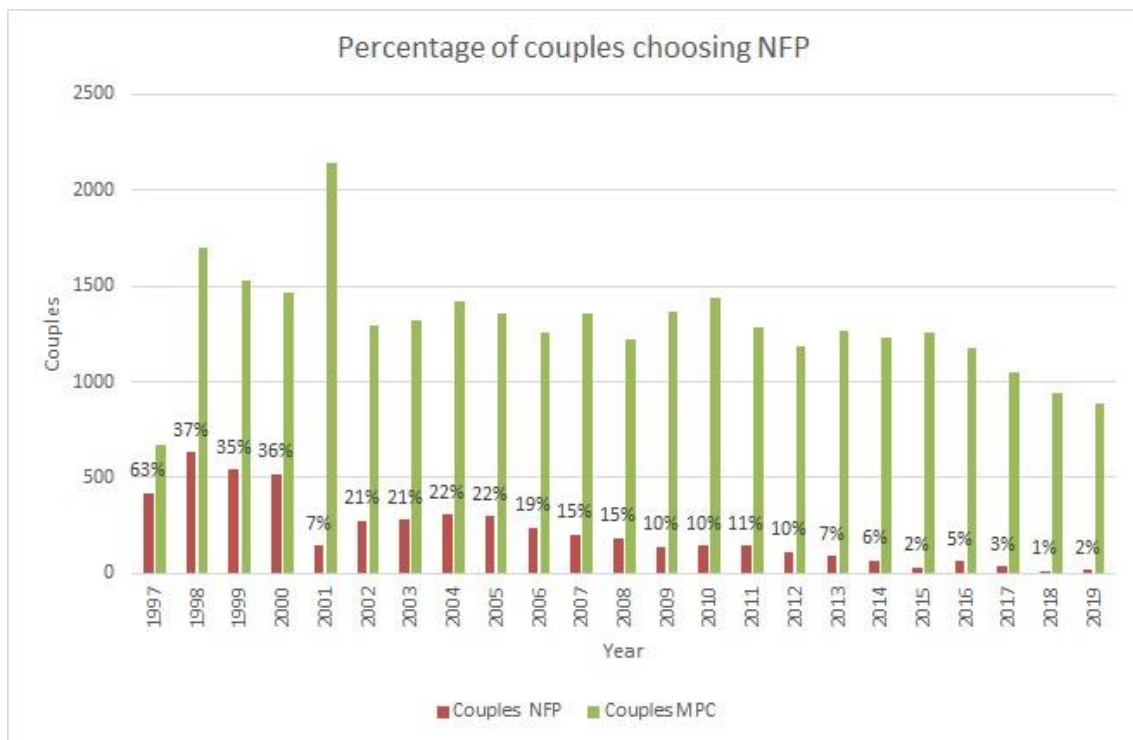
¹⁷ Charles Savona Ventura, "The Influence of the Roman Catholic Church on Midwifery Practice in Malta," *Medical History* 39, no.1 (1995): 18-34. doi:10.1017/s0025727300059469.

¹⁸ Cana Movement, *Familjakana*, Floriana, <http://www.canamovement.org/about-us>

¹⁹ Savona Ventura, "The Influence of the Roman Catholic Church," 30.

marriage. In the session about responsible parenthood, the leading couples speak about Natural Family Planning (NFP), referring to the Symptothermal Method, as a method that is in line with Catholic teaching. Group leaders talk about the health advantages, how this method respects the spouses as whole persons and how NFP does not rob them of sexual intimacy even though abstinence is required on fertile days to avoid getting pregnant. Attendees are invited to register for an NFP course to learn more about the method and its application.

The number of couples opting to follow the NFP course reached its peak in the 1980s and 1990s. Annual reports of the Cana Movement reveal a steep decline since then. Presently, most couples following marriage preparation courses do not register for the NFP course. In 1998, 37% of the couples preparing for marriage registered for NFP. In 2000, there were 36% and in 2005 only 22%. The interest in NFP dropped further to 10% in 2010, 2% in 2015 and remained at 2% in 2019.²⁰



²⁰ Cana Movement, *Annual reports 1997-2019*, Catholic Institute, Floriana. (unpublished data).

A study about the use of NFP in Malta was carried out in 1971. The findings revealed that 87% of 321 female participants under the age of 45 were using some form of fertility control and 25% of this group used the Rhythm Method. Another survey held in 1983 among 5286 puerperal women showed that only 11.8% intended to use NFP.²¹ In the meantime, the influence of a secular pressure group 'Min-naha tan-Nisa', was the reason for new state managed family planning clinics to open in 1982 where all methods of contraception were promoted and made available.²² In 2002, the Department of Health carried out a National Health Interview Survey (HIS) of 5510 individuals (46.88% males and 52.84% females) over the age of 16. The results of the question regarding the use of contraception showed that only 11.79% used NFP, 14.01% used the withdrawal method, 13.26% used the condom and 5.85% used the contraceptive pill (1.94%) or other methods. The rest of the participants did not answer this question. Interestingly, this study showed that the use of NFP increased in proportion with the age group of the respondents.²³

In 2006, Mizzi, Tufigno, and Calleja carried out a quantitative study among those who had followed an NFP course between 1995 and 2004 to evaluate the programme. Out of the 650 questionnaires, there were 280 respondents. There were 49% who reported that what they learnt during the course came to very good use and 57% considered NFP as very reliable.²⁴

A year later, Andee Agius explored the perception of couples on the use of NFP in a survey among 38 Maltese couples over the age of 18, who were following a Parentcraft course at Karin Grech Hospital. Out of 38 distributed questionnaires, 26 were valid. Her findings showed that most of the participants knew that NFP referred to planning a family without the use of contraceptives. Of the female participants, only seven knew

²¹ Savona Ventura, "The Influence of the Roman Catholic Church," 18-34.

²² Ibid., 130.

²³ Department of Health, The First National Health Interview Survey (His Malta) 44, https://deputyprimeminister.gov.mt/en/dhir/Documents/national_his_a__summ_stats.pdf.

²⁴ Joseph Mizzi, Pauline Tufigno and Neville Calleja, "An Audit of Natural Family Planning Training and Usage," *Sixth Malta Medical School Conference Abstract Book Supplement*, Volume 18, December 2006, 51, <https://www.um.edu.mt/library/oar/bitstream/123456789/15834/1/MMJ%206th%20Medical%20conference%202006.pdf>, accessed on 23 May.

that NFP involved the observation of fertility signs. Two females and one male also defined it to plan a family in line with one's religious beliefs. The study also showed that 20 males and 21 females knew that NFP involved the taking of temperature, 18 females and 15 males were aware of cervical mucus observation, and 14 females and 13 males also knew about cervical palpation. Yet only four females and two males were familiar with the term Symptothermal Method. Four females and seven males showed that they did not know what NFP was. In her study, Agius inquired where the couples got their information from. Most mentioned they heard about it in the marriage preparation course led by the Cana Movement. Respondents also mentioned church groups, television, and relatives. Only one participant stated that she obtained information from her gynaecologist. Particularly noteworthy is the fact that all the participants were Roman Catholic and eight couples had attended an NFP course.²⁵

Savona Ventura carried out another study among 211 individuals in 2012. When he compared the results with previous studies, he found that the use of the Rhythm Method decreased significantly over time. From 40% in 1971, there was a drop to 20% in 1993 and 12% in 2010. The marketing for contraceptives as being more effective methods was received well by the population; with hardly any use in 1971, their use rose to 18% in 1993 and 27% by 2010. Savona Ventura acknowledges that his study is not to be assumed as one representing the whole Maltese population because it was addressed to a higher educated category.²⁶

The Cana Movement is still providing NFP education which is targeted specifically to couples preparing for marriage. Natural Procreative Technology (NPT) and Fertility Education Medical Management (FEMM) have also been introduced in Malta as methods of family planning and as new alternative ways of treating reproductive health disorders.

²⁵ Andee Agius, "Perceptions for Couples Regarding the Use of the Natural Family Planning Methods," Bachelor of Science dissertation, University of Malta, 2007, 43-47, https://www.um.edu.mt/library/oar/bitstream/123456789/56026/1/Agius_Andee_Perceptions%20of%20Couples%20regarding%20the%20use%20of%20the%20Natural%20Family%20Planning%20Methods.pdf.

²⁶ Savona Ventura, "The Influence of the Roman Catholic Church," 18-34.

NPT was introduced at the Gozo General Hospital in May of 2012 and nine months later the NaPro Clinic and the Fertility Care Clinic were inaugurated at the B’Kara Health Centres. The service was jointly run by the only Maltese obstetrician and gynaecologist trained in the system, and a fertility care nurse trained to teach women the Creighton Model Fertility Care system (CrMS) which is the foundation for the application of NPT. Apart from the already existing clients of the obstetrician, people heard about the new service on local media when it was launched, and others got to know about it by word of mouth. It was also promoted and endorsed by the Diocese of Gozo.²⁷ Women and adolescents seeking the service included those suffering from the common conditions described in the previous chapter, mainly PCOS, endometriosis, dysmenorrhea, heavy and irregular periods. There were also a number of couples who had gone through IVF to no avail and out of sheer desperation to conceive decided that one more go could not do any harm. Unfortunately, not much promotion was given to the NPT service and for unknown reasons, it was terminated towards the beginning of 2019. During the six-year provision, there were 655 new cases and 1262 follow-ups.

The fertility care nurse stated in a private conversation that women got attracted to the system precisely because it helped them understand how their body worked, and they felt they could finally give sense to what was going on within them. She admitted that some clients were sceptical at first and sought their help after having circulated various practitioners. The nurse explained how these eventually appreciated the holistic care approach of NPT. She also stated that there were several couples who achieved pregnancy by using this method. The service is still being offered in the private sector of which there is no official record, however, there seems to be a regular flow of new cases.²⁸

In October 2017, the first FEMM team made up of two doctors and two fertility care teachers was introduced in Malta and its introduction was supported by the local archdiocese. While FEMM is a branch of the Life Network Foundation Malta, it forms part of the global FEMM network. Since its introduction in Malta, the medical

²⁷ Gozo Diocese, Diocese of Gozo Statement of the Presbyteral Council.

<http://gozodiocese.org/2012/05/13/servizz-ta-naprotechnology-mill-isptar-general-ta-ghawdex/>.

²⁸ Katya Camilleri, e-mail to Marie Sciberras, June 9, 2020.

practitioners trained in FEMM have taken this approach with their clients. The FEMM teachers have conducted courses for small groups and to individual couples. They support those applying FEMM in their daily life, and refer adolescents, women, and couples to the FEMM medical practitioner for any medical management. Unfortunately, the number of individuals or couples making use of FEMM is not available.²⁹ To date, FEMM educators operate independently and the service is not included in the national health or education programme.

3.4 Why FABMs are Unpopular

There could be several reasons why FABMs are not much promoted and practiced in Malta. Some of which are the wave of secularisation, the globalised technocratic paradigm, ongoing social and cultural changes, the different moral positions taken by members of the Catholic Church after the promulgation of *Humanae Vitae*, inadequate information delivered to medical students, the limited options of fertility care and family planning in clinics, the general lack of knowledge about fertility among the public, the circulation of untruths and false perceptions of FABMs, and the shortage of fertility care teachers.

Unpopularity of FABMs is partly a result of the wave of secularisation reaching the islands.³⁰ The first section of this chapter already demonstrated that the Maltese community has shifted towards a more liberal sexual mentality and distanced itself from some of the longstanding values that were also promoted by the Catholic Church. This liberal mentality does not favour the use of FABMs because couples who use these methods acknowledge that they are not the master of the sources of life and do not have unlimited dominion over their body in general, and their specifically sexual faculties.³¹

Today's mentality is also influenced by the globalised technocratic paradigm mentioned in *Laudato Si* and referred to in the introduction of this study. This technocratic paradigm

²⁹ Mariella Catania and Mary Bezzina, FEMM teachers, private conversation.

³⁰ Savona Ventura, "The Influence of the Roman Catholic Church," 31.

³¹ Paul VI, *Humanae Vitae*, sec. 13.

along with today's fast paced life pave the way to new habits that inadvertently affects one's reasoning. Such attitudes and habits do not provide an adequate environment for the cultivation of values and virtues such as patience and perseverance, which are fundamental for the practice of FABMs. Since the methods are based on a natural process, they require time to learn and get accustomed to. FABMs for family planning, require selective intercourse over spontaneous intercourse, a practice that can be a discouraging factor to some. When treating gynaecological conditions, it takes several cycles to monitor one's health and properly investigate the cause of the problem. The 'waiting factor' is pronounced even more when dealing with infertility. Anxious couples would hesitate to go through lengthy months of charting and could possibly consider Artificial Reproductive Technology (ART) which is assumed to be a faster route to achieving pregnancy. The globalised technocratic paradigm also affects the way people perceive achievement. Some people assume that achievement is about doing something that provides an instant result. For instance, this is manifested in the medical field where patients expect instant, favourable outcomes from treatment.

The practice of FABMs is also influenced by the ongoing social, political, cultural, and scientific changes, particularly contraceptive practices. Many of these developments may be directly or indirectly linked to, among others, political lobbying, financial and social conditions, more emphasis on freedom and autonomy, the weakening of social support structures and sex education.³² Some of these lead to extreme lack of funding towards FABMs. Contributing financial incentives for the promotion of these methods has hardly any gain compared to the large profits made by marketing contraceptives. Moreover, the shift towards a digital culture that is transient is having a powerful impact on intimate relationships. Just as the Internet is allowing people to engage in multiple online interactions simultaneously, and choose to withdraw and to re-establish new connections at the click of a button or the swipe on a screen, so one is prone to develop lower tolerance and patience levels to the detriment of real life relationships.³³ This

³² Francis, *Amoris Laetitia*, Apostolic exhortation, Vatican website, March 19, 2016, sec. 31-57, http://www.vatican.va/content/francesco/en/apost_exhortations/documents/papafrancesco_esortazione-ap_20160319_amoris-laetitia.html.

³³ Delicata, "The Family and The Dominant Technocratic Paradigm: Challenges in the Digital Culture," 236-240.

attitude reinforces a contraceptive mentality that automatically rejects the practice of FABMs. People who see no value in waiting find it harder to accept the self-discipline that goes with the decision of selective over spontaneous intercourse. This is confirmed by studies conducted in the US and seen in the 2007 survey by Agius. Participants expressed fear of FABMs. Like several other, they perceive the loss of spontaneity as unnatural behaviour that could be also be detrimental to the marital relationship in the long term.³⁴

The different positions among moral theologians after the promulgation of *Humanae Vitae*, the 1968 encyclical of Pope Paul VI on the regulation of birth, and the ensuing controversial debates created confusion that certainly did not facilitate the place of FABMs in the life of the couple. The Pope called for responsible parenthood; he equally called for scientists to develop healthy ways to regulate fertility. He also reiterated the Catholic Church's stance against contraception, not because it is artificial but because it is a direct act against conception. Those who thought it was time for development were infuriated. What they failed to realise was that the Church too was in favour of development; the kind that safeguards the human person in its whole integrity. Consequently, the teachings of this important encyclical became "mostly forgotten among the people of God — or if not exactly forgotten, ignored or misunderstood"³⁵.

Another reason is that women and couples who wish to take measures to regulate their family size are not presented with NFP on a par with contraceptives when seeking advice. The fact that in Agius's survey only one woman was told about NFP by her gynaecologist corresponds to the results of two separate studies carried out among general practitioners and gynaecologists in Missouri and British Columbia in 1999 and 2009, respectively. In these studies, researchers concluded that the majority of physicians underestimated the use and effectiveness of FABMs, often quoting obsolete

³⁴ Leona Vande Vusse et al., "Couples' Views of the Effects of Natural Family Planning on Marital Dynamics," *Journal of Nursing Scholarship* 35, no.2 (2003): 171-176, <https://sigmapubs.onlinelibrary.wiley.com/doi/abs/10.1111/j.1547-5069.2003.00171.x>; Agius, "Perceptions for Couples Regarding the Use of the Natural Family Planning Methods," 64.

³⁵ Delicata, "Revisiting *Humanae Vitae* Fifty Years Later," 52.

statistics.³⁶ In a 1990 study, only 10% of more than 450 general practitioners and gynaecologists recommended NFP methods to their patients.³⁷ These findings support those found in a study carried out seven years later amongst 121 Italian family doctors, out of whom, only 8% proposed NFP methods.³⁸ In 2001, another study among nurses and midwives showed that the majority of the participants felt ready to offer NFP advice after attending an educational program but only 22% were confident to promote NFP as a method of family planning for child spacing.³⁹

What medical students learn in medical schools affects the kind of family planning advice given by practitioners in clinics. A US survey carried out between 2013–2015 among medical students revealed they had little knowledge about the use of FABMs. According to the study, many medical schools in the US teach about methods of contraception but not about FABMs.⁴⁰ This could also be said for the Maltese medical school. According to the description of the Obstetrics and Gynaecology study-units offered by the University of Malta, accessed at the time of writing, training presents medical students with the opportunity to “[s]afely prescribe hormonal treatment in the management of the gynaecological patient,” and “[e]xplain to a patient in a professional

³⁶ Joyce Choi, Sherry Chan, and Ellen Wiebe, “Natural Family Planning: Physicians’ Knowledge, Attitudes, and Practice,” *Journal of Obstetrics and Gynaecology Canada* 32, no.7 (2010): 677, [https://www.jogc.com/article/S1701-2163\(16\)34571-6/pdf](https://www.jogc.com/article/S1701-2163(16)34571-6/pdf), accessed May 22, 2020; Joseph Stanford, Poppy Thurman, and Janis C. Lemaire, “Physicians’ Knowledge and Practices Regarding Natural Family Planning,” *Obstetrics & Gynecology* 94, no.5 (1999): 672-678, https://journals.lww.com/greenjournal/Fulltext/1999/11000/Physicians__Knowledge_and_Practices_Regarding.6.aspx, accessed on June 10, 2020; Agius, “Perceptions for Couples Regarding the Use of the Natural Family Planning Methods,” 25.

³⁷ Gerd Döring et al., “Results of a Physician Survey on the Status of Knowledge and Attitude to Natural Family Planning in West Germany 1988,” *Geburtshilfe und Frauenheilkunde* 50, no. 1 (1990):43-8. <https://www.semanticscholar.org/paper/%5BResults-of-a-physician-survey-on-the-status-of-andD%C3%B6ring-Baur/8272eec758bcbcd6204b443dc12838c736855b39>.

³⁸ Sara Girotto et al., “The Behaviours of Italian Family Physicians Regarding the Health Problems of Women and, in Particular, Family Planning (both contraception and NFP).” *Advances in Contraception* 13 no.20 (1997): 283-293, <https://link-springercom.ejournals.um.edu.mt/article/10.1023/A:1006576626670#citeas>.

³⁹ Richard J. Fehring, Lisa Hanson, and Joseph B. Stanford, (2001). “Nurse-midwives’ Knowledge and Promotion of Lactational Amenorrhea and Other Natural Family-planning Methods for Child Spacing,” *Journal of Midwifery Women’s Health*, 46 no.2 (2001): 68-73. [https://onlinelibrary-wileycom.ejournals.um.edu.mt/doi/full/10.1016/S1526-9523\(01\)00094-0](https://onlinelibrary-wileycom.ejournals.um.edu.mt/doi/full/10.1016/S1526-9523(01)00094-0).

⁴⁰ Peter G. Danis, Sally A. Kurz, and Laura M. Covert, “Medical Students’ Knowledge of Fertility Awareness-Based Methods of Family Planning,” *Frontiers in Medicine*, 4 (Lausanne, 2017): 65. <https://www.frontiersin.org/articles/10.3389/fmed.2017.00065/full>.

and sensitive manner the correct use of the methods available for family control.”⁴¹ Doctors do learn about the reproductive system and hormonal functions, yet information about how these systems can be monitored through FABMs, and how in turn FABMs can be used as a diagnostic tool and for family planning is deficient. This is possibly due to the association of FABMs to the Rhythm Method used in the 1930s. It could also be based on the biased idea that the only effective measures to diagnose and treat certain gynaecological and female reproductive health problems is through hormonal birth control pills or devices. In fact, it is very common for adolescents and women to show up in clinics with conditions like irregular cycles and heavy bleeding to be immediately treated with medical or mechanical contraceptive devices that could cause adverse reactions and as previously mentioned mask important signs and symptoms of other conditions.

Another reason why FABMs are not commonly used is the general lack of knowledge about them among the public. In a survey on NFP in Malta carried out by Agius in 2007, 42 of 52 respondents reported that there is not enough information on the subject.⁴² Speaking of information, it is also interesting that around half of the participants who had attended the NFP course did not know that the Symptothermal Method is a NFP method and considered the withdrawal method as a natural method. This could mean “that either the participants who attended the course did not understand the contents of the course or else more information needs to be given to these couples.”⁴³ This indicates that NFP teachers have to make sure that the information they convey is well understood. This is important and fundamental to the right of informed choice and patient participation.

Unfortunately, there are also people who circulate untruths or false perceptions about the reliability of FABMs, stating for example that they are too complicated to use and are unsuitable for women with irregular cycles. In the survey conducted by Agius, 13 participants stated that they did not consider choosing NFP for different reasons,

⁴¹ Faculty of Medicine and Surgery, *Doctor of Medicine and Surgery Programme Description*, University of Malta, 2020, <https://www.um.edu.mt/courses/programme/UMDFT-2020-1-O>.

⁴² Agius, “Perceptions for Couples Regarding the Use of the Natural Family Planning Methods,” 53.

⁴³ *Ibid.*, 60.

including their perceived unreliability.⁴⁴ Worse still, there are some who dare say FABMs are pointless without themselves ever having attended a course or sought information about the methods. Some also argue that FABMs still need to be researched and studied to confirm the mentioned advantages and to promote it. However, the need for further research also applies to the contraceptive industry, but this has not hindered their widespread use.⁴⁵ There are also couples who claim to use the method but do not adhere to its rules. The occurrence of an unintended pregnancy in these cases are linked to a failing FABM, rather than to a decision taken by the couple to disregard fertility signs and engage in sexual intercourse during fertile days. Moreover, some people are prejudiced against FABMs believing the methods have religious connotations. Others associate these methods with the Catholic Church simply because it promotes and teaches them.

On a practical level, the number of available NFP teachers also affects the interest of couples in FABMs. If a local promotion campaign were to increase the demand to learn FABM use, there would not be enough fertility care teachers to provide a good service as teachers who provide courses are also on the decline. For instance, sometimes the Cana Movement turns down applications because of the lack of teachers. Consequently, on hearing that applications are at times rejected, couples could choose not to apply in the first place.

3.5 The Way Forward

After having discussed the ethical advantages of FABMs, the practice of these methods in Malta and the major reasons behind their unpopularity or outright rejection, this section will present holistic education as a key factor for change. Education includes the acquisition of knowledge and understanding which are fundamental for one to reason and act prudently.

⁴⁴ Agius, "Perceptions for Couples Regarding the Use of the Natural Family Planning Methods," 64.

⁴⁵ Michael D. Manhart and Richard J. Fehring, "The State of the Science of Natural Family Planning Fifty Years after Humane Vitae: A Report from NFP Scientists' Meeting Held at the US Conference of Catholic Bishops, April 4, 2018," *The Linacre Quarterly* 85, no. 4 (2018): 339-347. doi:10.1177/0024363918809699.

This section will start by highlighting the importance of a holistic sexual and FA education to children and adolescents. In a culture that often approaches sexuality and fertility in a fragmented manner, this type of education facilitates a comprehensive understanding of these topics and shows how, alongside other attributes that make up the human person, sexuality and FA have an influence on the quality of one's life. It seeks to provide students with skills that will help them to live ethically and in harmony with themselves and their social milieu.

This section will also underline the need to include FABM knowledge in medical, nursing and midwifery training. It will then propose ways to provide adequate education about FABMs to the public. Finally, this part will show how the practice of FABMs can only be realised if FA education is complemented by accessibility and availability of services.

3.5.1 Holistic sexual and FA education

Humans are complex beings composed of body, mind, and spirit; an entirety that allows for one to live, think, feel and act only because of the interdependence of one state on the other. Sexuality is incorporated in the physical element and intertwined with other facets that make a total being; a process that starts before birth and continues till death.⁴⁶ It involves “the interrelationship of biological, psychological, and sociocultural dimensions”⁴⁷ and is affected by the comportment of parents, primary caregivers, teachers, and peers. Politics, economy, religion, media and education programmes definitely leave their mark.

Within the course of childrearing, talking about sexuality is often overlooked. The subject is generally avoided in households because to most, it is about sexual activity. Parents and guardians may feel embarrassed to talk about it or do not consider it necessary. Others rely on the notion that sexuality is dealt with at school during Personal, Social and Career Development (PSCD) sessions which in Malta, like in many

⁴⁶ Jason T. Eberl, *Thomistic Principles and Bioethics* (New York: Routledge, 2006) Kindle edition, 6,13.

⁴⁷ Jerrold S. Greenberg, Clint E. Bruess, Sara B. Oswalt, “Introducing the Dimensions of Human Sexuality,” *Exploring the Dimensions of Human Sexuality*, 6th ed., (Burlington: Jones & Bartlett, 2014) 5, http://samples.jbpub.com/9781449698010/48510_CH01_Sample.pdf.

other countries, form part of the national curriculum.⁴⁸ James H. Ritchie, an American speaker on sexuality, explains how this “[s]ilence teaches that sex falls into the category of uncomfortable, inappropriate, and outside the bounds of family conversation.”⁴⁹ The lack of communication about sexuality might leave a child to stand alone when somewhere along the continuum, he or she will have to cope with the myriad of changes brought about by puberty. The child or adolescent will have to find a way to “respond to the bombardment of sexual thoughts, images, and feelings coming from within and without.”⁵⁰ Parents and guardians might not realise that by avoiding discussions about sexuality, they will be abdicating their right “to choose the kind of education that shall be given to their children.”⁵¹ Furthermore, they will be surrendering the mind of their children to an array of ideologies provided by a culture that might not match their own values and beliefs.⁵²

Contemporary education systems do not aim only to impart knowledge. They also advocate a holistic-care approach that nurtures all the aspects of a student and emphasises his or her right to holistic development.⁵³ In light of the principle of totality, whereby every human being is respected and viewed as a ‘whole’⁵⁴, PSCD curricula include among other topics, sexual education. PSCD sessions provide information about biological changes in both males and females and sexual development, and create room for discussions about relationships, contraception, and sexual behaviour.⁵⁵

However, sexual education often fails to tackle FA even though it is a significant part of sexuality. Fertility is rightfully presented in relation to the menstrual cycle and to

⁴⁸ Curriculum Management and eLearning Department, *Personal, Social and Career Development Curriculum*, Directorate for Quality and Standards in Education, https://curriculum.gov.mt/en/new_syllabi/Pages/PSCD.aspx.

⁴⁹ James H. Ritchie, “The Gift and Its Youngest Recipients,” in *Sexuality: God’s Gift*, ed. Anne Krabill Hershberger, (Scottsdale PA: Herald Press, 2010), Kindle Edition, 74.

⁵⁰ Anne Krabill Hershberger and Willard S. Krabill, “The Gift”, in *Sexuality: God’s Gift*, ed. Anne Krabill Hershberger, (Scottsdale PA: Herald Press, 2010) Kindle edition, 18.

⁵¹ United Nations, “Universal Declaration of Human Rights,” Article 26(3), United Nations General Assembly in Paris on 10 December 1948, https://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf.

⁵² Ritchie, “The Gift and Its Youngest Recipients,” 72.

⁵³ United Nations, “United Nations Convention on the Rights of the Child”, art. 32.

⁵⁴ Linda van Rooyen, *Sexuality Education in the Classroom*, (Pretoria: Kagiso Publishers, 1997), 73.

⁵⁵ Sr Vania Bonello, telephone communication, on February 19, 2020.

reproduction. When discussing the menstrual cycle, especially with girls, menstruation seems to be the main event that moves the conversation towards practicalities. Amidst giggles and grimaces, female students exchange ideas and concerns about the best sanitary towels on the market, the use of tampons, dealing with menstrual pain, feeling restricted, finding comfort in food and the eruption of pimples. However, the fact that the menstrual cycle is a measure of health and key to a woman's fertility is usually sidelined. Furthermore, the concept of fertility as a gift is often overshadowed by well-meaning advice from educators to stay on guard and be extremely cautious in relationships in fear of contracting a disease or getting pregnant.⁵⁶ In *Amoris Laetitia*, Pope Francis points out this limitation in contemporary sex education which tends to be more focused on 'protection' through the practice of 'safe sex' and seems to portray pregnancy as though it were a dangerous event, and the child as "an enemy to be protected against". Such an attitude, he states, goes against the natural procreative finality of sexuality, and could promote "narcissism and aggressivity in place of acceptance."⁵⁷

The same PSCD sessions empower students to discover their ambitions, reach their goals and embark on their careers. Yet, within this discourse, the mention of the age-fertility factor is scarce if at all present. The Scientific Impact Paper produced in 2011 on behalf of the Royal College of Obstetricians and Gynaecologists (RCOG) proposed that advice to adolescents in schools "should consistently reflect that the optimal age for childbearing is between 20 and 35 years, for obstetric as well as for reproductive health reasons."⁵⁸

⁵⁶ Directorate for Quality and Standards in Education. Curriculum Management and eLearning Department, Personal, Social and Career Development Curriculum, https://curriculum.gov.mt/en/new_syllabi/Pages/PSCD.aspx.

⁵⁷ Francis, *Amoris Laetitia*, sec. 283.

⁵⁸ Royal College of Obstetricians & Gynaecologists, "Reproductive Ageing," *Scientific Impact Paper No. 24*, (2011):2.

Nations are facing the consequences of poor FA and sexual education at home and in schools.⁵⁹ Various surveys conducted in New Zealand, South America, the UK, Australia and elsewhere reveal that women lack sufficient knowledge about fertility.⁶⁰

For this reason, sexual education must start early with the cooperation between homes and schools.⁶¹ When children ask questions, they deserve to be told the truth. This might create controversy as some parents, guardians and educators are of the idea that girls and boys should not be exposed to such matters of sexuality and fertility at such a young age. Age-appropriate information is key to facilitate the processing and understanding about sexuality and fertility. A book called *Once Upon a Time in Embryoland*, satisfies the need for knowledge of the young mind. It explains where babies come from, and how they are made through simple illustrations and language, without distorting the true biological facts and at the same time avoids unnecessary detail.⁶² This kind of knowledge forms a good foundation for students and prepares them for further fertility education in adolescence.

The need for FA to be included in sexual education programmes for all, is observed by Geeta Nargund, a lead consultant for Reproductive Medicine services at St George's Hospital London. She states that

[I]audable and effective though these programs are they are very much concerned with the problems of unwanted pregnancy, STI's, abortion and contraception. All curricula cover reproductive science usually in a different module but although I have examined a large number of biological science curricula from different European countries I have yet to see the question of fertility education being addressed.⁶³

Girls in particular, need to know how their body functions, how it moves from one stage to another, how hormones influence energy levels, cognitive function, nutritional needs,

⁵⁹ Catherine Jex, "Sex Education is Failing Young People," *ScinceNordic*, 16, September 2016, accessed May 6, 2020, <https://sciencenordic.com/school-sex-sexual-education/sex-education-is-failingyoung-people/1437477>.

⁶⁰ Laura Bunting and Jacky Boivin, "Knowledge About Infertility Risk Factors, Fertility Myths and Illusory Benefits of Healthy Habits In Young People," *Human Reproduction* 23, no.8, (2008): 1858–1864, doi:10.1093/humrep/den168; Knight, *The Complete Guide to Fertility Awareness* 5,6.

⁶¹ Linda van Rooyen, *Sexuality Education in the Classroom*, 73.

⁶² Olga Gouni and Jean Calleja Agius, *Once Upon a Time in Embryoland* (Athens: Cosmoanelixis, 2018).

⁶³ Nargund Geeta, "Why Fertility Education is Needed in Schools," *Facts, Views & Vision in Obstetrics, Gynaecology and Reproductive Health*, 7, no.3, (2015): 189, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4788335/pdf/FVVinObGyn-7-189-191.pdf>.

weight gain, skin conditions, feelings and moods that change from day to day. For instance, students who suddenly face difficulties to keep up with studies, extracurricular activities and family life are overwhelmed and might feel that they cannot perform like they used to. However, if adolescents could interpret the way their hormone levels manifest themselves during the menstrual cycle, they will surely be in a better position to predict such feelings and moods, and therefore take control of their own emotions. This consequently would affect relationships with others at home, school, and in different social environments.

Including FA in sexual education conforms with a holistic approach that also gives importance to respect, reasoning, attitude, behaviour, and decision-making skills both for oneself and in relation to others. Students obtaining correct information are motivated to seek further knowledge from reliable sources⁶⁴ and empowered to take ethical decisions regarding their reproductive health for and in the future. A study carried out by the Medical University of Vienna also showed parents who obtained knowledge through FABMs were more confident to explain sexuality to their children.⁶⁵ This is very important because, as Pope Francis writes in *Amoris Laetitia*, to educate individuals about their fertility is to lead them to appreciate their own body and that of others. Adolescents ought to be introduced to “sensitivity to different expressions of love, mutual concern and care, loving respect and deeply meaningful communication.”⁶⁶ This is what prepares them for a healthy relationship, and what lays a successful foundation for a commitment that reserves the sexual union for a marriage enriched by all the experiences preceding it.

3.5.2 Professional education

The lack of knowledge about FABMs amongst health care trainees and professionals, calls for the inclusion of FABMs and their use in higher and tertiary education

⁶⁴ World Health Organisation, *Sexual Health, Human Rights and the Law* (2015): 31.
https://www.who.int/reproductivehealth/publications/sexual_health/sexual-health-human-rights-law/en/.

⁶⁵ Matthias Unseld et al., “Use of Natural Family Planning (NFP) and Its Effect on Couple Relationships and Sexual Satisfaction: A Multi-Country Survey of NFP Users from US and Europe,” *Frontiers in Public Health* 5 (2017): 3, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5346544/>.

⁶⁶ Francis, *Amoris Laetitia*, sec. 283.

programmes designed for medical, nursing and midwifery students. This is of utmost importance because as future practitioners, they should be able to provide information about FABMs to those who seek to know about them. They should also be confident enough to offer these methods to individuals under their care. Failing to do so, can lead to a violation of the patient's right of information and the right to informed choice.⁶⁷ This is even more relevant because women attending for medical consultations, who lack sufficient knowledge, are often so consumed by their worry that they willingly accept advice or treatment without questioning. Some patients also take a subordinate role that indirectly gives medical and other health care practitioners a sense of dominion over them. This shifts the entire responsibility on the practitioners, who should be well informed about FABMs to be able to provide sound advice on these methods.

Professional development about the subject should also be made available for health practitioners working in this field. Besides, like with other areas of specialisation, medical practitioners should be provided with opportunities to further their studies in alternative fertility management like NPT and FEMM.

3.5.3 Public education

The consequence of inadequate sexual education is seen in the lack of knowledge about fertility awareness among the public. FABMs and their advantages should be included in health promotion campaigns and discussed in public talks. Their benefits should be explained and presented in ways that can be understood by everyone. The health system with the collaboration of other institutions and entities like local councils, can offer courses on two levels; it can help in funding the training of fertility care practitioners who in turn can participate by conducting FABMs programmes to members of the community.

Though proper sexual education from a young age will affect the general education of the population in the long term, there will always remain the need for ongoing education and promotion of FA at all levels and to everyone.

⁶⁷ Department of Health, *Patient's Charter* (Valletta: Ministry of Health, 2016), 12.
<https://deputyprimeminister.gov.mt/en/hcs/Pages/patients-charter.aspx>.

3.5.4 Accessibility and availability of services

Education and promotion of FABMs should be complemented by accessibility and availability. It can be quite frustrating for a well-informed female adolescent experiencing a gynaecological problem, to realise her medical practitioner does not consider FABMs as an effective method to observe and correct a reproductive disorder. Women should be invited to take decisions pertaining to their health⁶⁸ by actively participating in health care plans should they require medical or surgical interventions. Likewise, knowledgeable couples who wish to use FABMs for family planning, or who seek assistance after recognising possible infertility issues, should have access to fertility care services that support FABMs.

In Malta, the Catholic Church continues to provide FA education. However, it is the responsibility of the state to recognise FA as an important component of reproductive health and to mainstream FABMs into reproductive health care system. FA clinics should be reintroduced to offer education, guidance and support to adolescents, women, and couples.

3.6 Conclusion

Malta's Catholic heritage has provided the Maltese nation with a strong identity. Along the years it formed the foundation for ethical standards that until recently people lived by. Yet what seemed stable for hundreds of years, is now being challenged. Influenced by different cultures, new ideas and scientific progress, people find it easier to take different positions with regards to traditional moral values. Yet, the Maltese seem to want to have their feet in both camps. Research has shown while they endorse a more liberal sexual mentality, that they are still attached to various aspects of the Catholic heritage. Most still value the Catholic Church even if for different reasons, and whilst they support its presence, they do not feel the need to embrace the values it promotes.

⁶⁸ Vatican Statement, "Ethics and Human Values in Family Planning," 90.

The shift towards a more liberal sexual morality and the dominance of a globalised technocratic paradigm “tends to absorb everything into its ironclad logic”,⁶⁹ even in Catholic Malta, subtle changes in ethical reasoning that led the Maltese to accept, practice and rationalise new trends. This can be said for the rejection of FABMs and NFP, and the way contraceptive use is justified and considered an innovative means that liberates women. In a globalised technocratic paradigm, the contraceptive mentality with its persuasive dictum that besides being most effective, contraceptives provide bodily autonomy and sexual freedom, directly targets FABMs and the ethical advantages associated with them.

Even practitioners with the best of intentions seem to be entrapped in this contraceptive culture “promoted by the world politics of reproductive health.”⁷⁰ This is especially evident in the amount of contraceptive pills prescribed to adolescents for a thousand reasons other than contraception. It seems that the medical community has “yet to fully grasp the scientific validity and endless benefits of FABMs”⁷¹ and practitioners need to brush up their knowledge regarding the improved methods.

This chapter has indicated that the unpopularity and rejection of FABMs is also based on lack of knowledge, prejudice, and false assumptions⁷² that can be overcome with proper age-appropriate sexual education, more knowledge about FABMs amongst health care trainees and professionals, accurate information on FA, FABMs and their benefits in health promotion campaigns, and accessibility to professional advice assistance about the uses FABMs as part of the national health care system.

⁶⁹ Francis, *Laudato Si*, sec. 108.

⁷⁰ Francis, *Amoris Laetitia*, sec. 42.

⁷¹ Weschler, *Taking Charge of Your Fertility*, 15.

⁷² Agius, “Perceptions for Couples Regarding the Use of the Natural Family Planning Methods,” 22, 60.

Conclusion

Nature is cyclical and it is through the observance of natural cycles that humanity has learned much about the environment and has been able to make immense progress in all areas. Human beings are also cyclical by nature. A woman's life revolves around her own cycle throughout her reproductive life. Every woman is unique, and so cycles occur differently from woman to woman.

This dissertation explained how the female body starts preparing for fertility while still in utero when at around the sixteenth week of gestation there are about seven million primordial follicles, which decrease to two million by the time of birth. A growth spurt during puberty involves physical, physiological, and psychological changes that occur in response to elevated hormones levels. In young females, the surge of hormones brings about the onset of menarche which at times is fraught with apprehension and often considered as the decisive event that confirms adolescence. Yet it is much more than that; menarche is an important milestone that marks the beginning of a reproductive capacity.

This study showed how the body functions in terms of the menstrual cycle, and how it can indicate good health. It also showed how the body gives natural signals to reveal certain gynaecological and other health issues. Ignored biological messages lead to other related health issues that when treated might leave the original problem unsolved. Diversely, information obtained through FABMs can lead to the diagnoses and early treatment of the root causes of most gynaecological conditions that at times lead to infertility. This work also explained how FABMs can aid in solving some infertility problems in a healthy ethical manner. It focused on the ethical advantages of FABMs regarding responsible parenthood, family planning and couple relationships.

The third chapter demonstrated the widespread lack of knowledge about fertility; not only among the public in general, but surprisingly enough, even among medical, nursing and midwifery students. This group of students would have achieved an advanced level of biology and most of them would have done so with flying colours. When Jean Calleja Agius, a professor of Obstetrics and Gynecology at the University of Malta, talks about

basic fertility facts to her students, she is regularly met with blank faces. Expressing her concern, Calleja Agius writes “if the crème de la crème don’t have the right knowledge, what about the rest of our youth?”¹

For this reason, the dissertation highlights the necessity of proper sexual, FA and FABMs education at various levels. Parents and guardians should take every opportunity to discuss sexuality in households and seek advice when needed rather than avoid such talk. At the same time, educators should realise they hold an important role in age appropriate fertility education of children, adolescents and young people. Medical and other healthcare professionals should be well informed about FABMs because they are the ones people consult for advice about such matters.

Above all, this study revealed the dominant grip of a globalised technocratic paradigm on today’s individuals and couples, particularly within the realms of knowledge, health, relationships, and reproduction. Liberation from the technocratic paradigm is vital for one to live an authentic life. This freedom is possible and can be achieved by recovering the power of ethical reasoning, living a virtuous life, and participating once again in the original plan for creation.² At a time when the practice of FABMs is ignored or opposed, “[t]he way forward appears to be a humble, yet clear, transmission of values and ideas that are readily understandable in secular terms even if they are different from secular ideas and values.”³ In this light, the promotion, availability, and use of FABMs become an effective alternative that challenges the dominant and enslaving technocratic model which attempts to dictate and re-invent the rules of fertility and reproduction.

¹ Jean Calleja Agius, “Science Alone Cannot Save Your Fertility,” Think (University of Malta, June 2020), <https://www.um.edu.mt/think/science-alone-cannot-save-your-fertility/>.

² Ibid., 232-233.

³ Gellel and Sultana, “Leaping from non-secular to post-secular. A study of the Maltese scenario,” 125.

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