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A VIRTUE ETHICS FRAMEWORK FOR MODERN ANATOMICAL PATHOLOGY

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Submitted to the Faculty of Health Sciences, University of Witwatersrand, Johannesburg, in fulfilment of the requirements for the Doctor of Philosophy Degree in Bioethics and Health Law

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Qualifications: BA Hons (Rhodes), MA (Rhodes), PhD (Milan)

Submission date: May 2022

DECLARATION

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

FACULTY OF HEALTH SCIENCES

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SENATE PLAGIARISM POLICY: APPENDIX ONE

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DEDICATION

This thesis is dedicated to my father, who has taught me the value of perseverance. I proudly strive to follow in your footsteps.

I also dedicate this thesis to the loving memory of my mother.

ACKNOWLEDGEMENTS

I would like to extend my deepest gratitude to my supervisor, Prof. Christopher Wareham, for being so generous with his time and for his invaluable guidance throughout this journey. I look forward to staying in touch in the future.

I am grateful to Sefako Makgatho University of Health Sciences for their ongoing support during my studies and to my colleagues who have nurtured and encouraged me throughout.

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I am deeply indebted to my family for affording me the time and space to conclude this journey and for their unwavering support, inspiration and understanding.

ABSTRACT

The central aim in this thesis is to develop a nuanced and practicable virtue ethics framework for modern anatomical pathology. The development of this framework is motivated by the neglect of virtue concepts in the current ethics discourse pertaining to modern anatomical pathology, coupled with the gaps associated in the application of the commonly used principle-based approach, in addressing ethical issues specifically encountered in the routine practice of modern anatomical pathology. This thesis addresses the gaps in current literature by advancing a virtue ethics framework for a neglected healthcare practice. The aim of this framework is to redirect the focus of ethical decision-making on the human facets, unique relationships and role-specific responsibilities characteristic of the practice. Furthermore, the virtue ethics framework is intended to guide ethical decision-making in the context of modern anatomical pathology practice, promote excellence in the achievement of the internal goods and immediate ends specific to the practice which in turn, furthers its *telos*, the well-being of the patient. Lastly, this framework aims to serve as the initial basis for the development of virtuous anatomical pathologists, through virtue-based moral education.

In outline, modern anatomical pathology is a diagnostic speciality that is largely laboratory based and that has progressively lost direct contact with the patients that they treat by means of a pathological diagnosis. Being laboratory based, however, does not mean that anatomical pathologists are not involved in patient care. In fact, advances in molecular diagnostic techniques are facilitating the involvement of the modern anatomical pathologist in caring for patients beyond the classical one-time diagnosis to a more elaborate involvement as part of the personalised approach to modern healthcare provision.

The thesis is structured as follows. Chapter one is the introductory chapter which provides the rationale for the thesis coupled with a brief overview of the various chapters and contributions made to the field. Chapter two characterises the various technical and human tasks that are involved in the pathological diagnostic process, that informs the ethical debates in subsequent chapters. Chapter three is a critical analysis of the shortcomings of the principle-based approach in resolving ethical conflicts that arise in clinical healthcare provision in general, and specifically, in modern anatomical pathology practice.

In chapter four, I evaluate whether a virtue-based approach is suitable in bridging the gaps identified in the application of the principle-based approach in the context of modern anatomical pathology practice and claim that it is. Thereafter, in chapter five, I discuss the

noteworthy elements of a couple of virtue accounts, specifically developed for clinical healthcare provision and pathology, respectively. In the latter part of chapter five, I present the initial elements of my virtue ethics framework in which I propose the use of empirical research in addition to philosophical analysis for the development of a comprehensive and practical framework. Chapter six is concerned with the presentation of the empirical findings in this thesis which informs the construction of the virtue ethics framework in chapter seven and the assessment of the ethical issues characteristic to the practice of modern anatomical pathology, in light of the framework developed in this thesis.

My conclusion is that the proposed framework is cogent, nuanced, and useful in application to resolving ethical issues that arise in the context of modern anatomical pathology practice with a view of shaping and encouraging the development of professional virtues which ensures virtuous practice.

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CHAPTER 1: INTRODUCTION

The central aim in this thesis is to formulate a cogent and nuanced virtue ethics framework for modern anatomical pathology. This aim is motivated by two important and distinct aspects. The first relates to the neglect of virtue concepts in the current ethics discourse pertaining to the discipline of modern anatomical pathology which is dominated by the principle-based approach. The second relates to the re-emergence and successful implementation of virtue-based conceptions of morality as a theoretical basis for ethics discourse in healthcare, most notably in the clinical disciplines. The principal inquiry emanating from these two aspects is whether virtue ethics can make a significant contribution towards a framework for professional ethics for modern anatomical pathology practice[1].

Virtue ethics, traditionally attributed to the Socratic philosophers of ancient Greece whose primary focus is on the character traits of the moral agent, has received increased consideration in bioethics literature in the past few decades. This growing interest is attributed to the realisation that character traits, are of significance for ensuring comprehensive ethical discourse in the healthcare setting. More recently, a variety of attractive modern forms of virtue approaches, have been put forward which aim to provide more substantive action guidance. These attempts are significant given that the paramount criticism levelled against traditional virtue ethics is the inability to provide concrete action guidance. These modern virtue-based approaches are useful in evaluating the link between deontic notions of rightness and wrongness with aretaic notions of virtue and vice. Moreover, the growing concern that the prevalent principle-based approach overlooks the human experience and contextual sensitivities of the ethical decision-making process in healthcare, has led to the incorporation of virtue concepts in various medical disciplines[2] most notably in those disciplines that are characterised by a direct relationship between the healthcare practitioner and the patient.

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[1] A practice (a term proposed by Alasdair MacIntyre) in a virtue-based context refers to a set of professional human activities by means of which certain goals are achieved. I discuss this concept in further detail in chapter four of this thesis.

[2] See, for example, Meara, N.M., Schmidt, L.D. and Day, J.D. (1996). Principles and virtues: A foundation for ethical decisions, policies, and character. *The Counselling Psychologist*, 24(1): 4–77; Armstrong, A.E. (2007). *Nursing Ethics: A Virtue-Based Approach*. Basingstoke: Palgrave; Horn, L.M. (2010). *Virtue ethics in the development of a framework for public health policymaking*. (Doctoral dissertation). Stellenbosch University; Giblin, M.J. (2002). Beyond principles: virtue ethics in hospice and palliative care. *American Journal of Hospice and Palliative Medicine*, 19(4): 235-239.

By contrast, virtue ethics continues to be comparatively overlooked in the context of modern anatomical pathology, although some virtue elements focusing on character are incorporated in the current principle-based approach which provides the dominant ethical discourse in the discipline. In outline, anatomical pathologists encounter ethical issues that arise outside the traditional patient-healthcare practitioner relationships and are mostly concerned with aspects related to a form of indirect patient care.

The central claim I defend in this thesis is that virtue ethics can make a significant contribution towards an ethics framework for modern anatomical pathology. More specifically, I claim that a teleological virtue-approach, centred on the aims specific to the practice, is helpful in clarifying the roles and responsibilities of anatomical pathologists, as well as the virtues that allow someone to be a good anatomical pathologist. Such a virtue approach addresses the gaps in the application of the principle-based approach to modern anatomical pathology.

Broadly speaking, the principle-based approach advanced by Beauchamp and Childress is currently the most influential and widely employed approach in ethical discourse in most, if not all, healthcare disciplines. In outline, these are the principle of beneficence (focused on providing benefits and minimising risk), the principle of non-maleficence (focused on reducing harm), the principle of respect for autonomy (focused on respecting the choices of autonomous individuals) and the principle of justice (focused on the appropriate distribution of benefits and risks) (Beauchamp and Childress, 2013).

Given that it may not seem apparent why virtue concepts are helpful in addressing the shortcomings of current ethical approaches for a speciality characterised by a largely absent relationship with the patient, this aspect requires further clarification. Modern anatomical pathology is a diagnostic speciality that is largely laboratory based and that has progressively lost direct contact with the patients that they treat by means of a pathological diagnosis. For the object of this thesis, I define anatomical pathology as *the use of histopathological and cytopathological knowledge and skills for the diagnostic care of the patient, outside the individual healthcare practitioner-patient encounter.* Such a definition is important in setting apart the practice of anatomical pathology from other medical practices which use scientific knowledge and skill specifically in the individual clinician-patient engagement. Being laboratory based, however, does not mean that anatomical pathologists are not involved in patient care. In fact, advancements in molecular diagnostic techniques are facilitating the involvement of the modern anatomical pathologist in caring for patients beyond the classical

one-time diagnosis to a more elaborate involvement as part of the personalised approach to modern healthcare provision. Aside from providing a more tailored diagnosis and a more accurate prognosis, these advances are enhancing the ability of anatomical pathologists to become more actively involved in treatment decisions for patients, including the monitoring of treatment outcomes; this involvement is however indirect, through a unique anatomical pathologist-clinician relationship.

I begin in chapter two, by providing an in-depth account of the various tasks involved in the pathological diagnostic process with specific focus on the human tasks and the unique relationships that develop between the anatomical pathologist and the treating clinician. This is an important starting point for this thesis as the human tasks involved in the various phases of the pathological diagnostic process are scarcely remarked in the literature. Furthermore, understanding the nuances of the various human tasks involved in the pathological diagnostic process provides context for the ethical issues that form the basis of the subsequent chapters. To this end, I describe the origins and developments relevant to the pathological diagnostic process. I then trace the phases of the pathological diagnostic process from the macroscopic[3] and microscopic[4] examination of the tissue removed from the patient (for diagnostic purposes) to the various interpretive phases that culminate with the communication of the final diagnosis to the treating clinician (who requested the pathological diagnosis). I characterise the pathological diagnostic process as a human endeavour achieved through various sequential human tasks. I show that these human tasks are complex and comprise analytical interpretive skills, the development of effective communication skills as well as significant abilities for understanding the implications of the pathological diagnosis in the further management of the patient (Pena and Andrade-Filho, 2009). I draw attention to the influence of recent technological developments and the unusual relationships in anatomical pathology on the accuracy and relevance of the pathological diagnosis for the further management of the patient. I lastly, draw attention to the need to explore the current role that anatomical pathologists play within the healthcare team which is superficially described in current ethics literature.

I then proceed in chapter three to discuss the ethical deficiencies in current ethical assessment in modern anatomical pathology practice and emphasise the need for ethical updates. I show in

[3] Macroscopic examination refers to the analysis of the removed tissue received with the naked eye, otherwise stated without the use of a microscope.
[4] Microscopic examination refers to the analysis of the tissue received with the use or aid of a microscope.

this chapter that the distinctive human aspects and unique relationships that characterise anatomical pathology are not identified with ease in current ethical discourse which is predominantly principle-based. Indeed, the ethical approach that Beauchamp and Childress advance, purports to provide a practical and accessible moral guide to solving ethical dilemmas encountered in healthcare provision. This approach is founded on common morality, that is a set of views of right and wrong behaviours widely accepted by most individuals who are committed to living a moral life (Beauchamp and Childress, 2013). Furthermore, Beauchamp and Childress's pluralistic approach is tailored to accommodate various general moral theories, in identifying the issues at play and determining which principles translate into obligations for healthcare practitioners (Beauchamp and Childress, 2013). Determining the obligations of healthcare practitioners, is achieved in the principle-based approach by two core processes of specification and balancing which culminates in the selection of the appropriate principle to follow (Beauchamp and Childress, 2013). The four principles of autonomy, beneficence, non-maleficence, and justice constitute a set of essential obligations that healthcare practitioners should consider each time they are faced with an ethical dilemma. However, despite its prevalence, I show that the principle-based approach, on its own, is insufficient to serve as a complete moral guide to professional practice in healthcare provision in general, and more specifically, in solving ethical dilemmas encountered in anatomical pathology. I make the case that by honouring its universal and pluralistic nature (which is meant to create a user-friendly guide for solving ethical dilemmas), the principle-based approach calls attention to the need of an account of the specific ends of the different subfields of medicine as well as an identification of the virtues and role-specific responsibilities of healthcare practitioners. I establish that, in the absence of some preceding account of the ends of healthcare practice, the processes of specification and balancing of the competing principles in ethical dilemmas encountered in the practice of modern anatomical pathology, are not particularly useful.

By making use of specific examples of the types of ethical dilemmas encountered in the practice of anatomical pathology, I make the case that, apart from the problems with the process of balancing and specification, there are further challenges associated with the application of the principles to the type of indirect form of patient care characteristic to modern anatomical pathology. These challenges relate to the lack of guidance in respect to resolving conflicts between professionals in the chain of healthcare provision; this in turn further emphasizes the importance of character and the need to identify the specific aims or goals of different subfields of medicine, together with role-specific responsibilities of healthcare practitioners.

I conclude that the gaps in the principle-based approach require supplementation with a set of virtues, if the principles are to provide adequate justification and guidance in ethical assessment in anatomical pathology practice.

Following an evaluation of the shortcomings of the principle-based approach and considering that the central aim in this thesis is to develop a virtue ethics framework suitable for ethical discourse in anatomical pathology, the focus of the next two chapters (chapters four and five) is on an in-depth exploration of virtue ethics. Chapter four is aimed at determining whether virtue ethics could successfully address the gaps identified in the application of the principle-based approach to modern anatomical pathology. Chapter five is directed to an evaluation of the more specific virtue ethics accounts with application in clinical healthcare and pathology, respectively. An exploration of these virtue accounts is of manifest relevance in identifying the noteworthy elements which can serve as the building blocks for the framework that I aim to develop in this thesis.

To this end, in chapter four I explore both the traditional Aristotelian notion of virtue ethics, as well as modern virtue approaches which are specifically directed at developing a normative standard of evaluating right action in term of virtue and vice. I show how Aristotelian teleological concepts of grounding virtues in specific goals or ends can be applicable in the context of healthcare. Drawing on concepts of virtues internal to a practice as Alasdair MacIntyre proposes, I begin to formulate the noteworthy elements that serve as building blocks for the virtue ethics framework which may be able to fill in the gaps identified in the principle-based approach. I engage with the objections levelled against virtue ethics, most notably that it does not provide adequate action guidance and show that this criticism is unwarranted, and that virtue ethics is relevant and helpful, particularly in the context of a practice with well-established roles and specific ends. I conclude that virtue ethics has a genuine role to play in ethical discourse in the practice of modern anatomical pathology.

Moving from the general to the particular, the focus in chapter five is on existing teleological virtue-based approaches specifically applied in the context of healthcare. The first virtue approach that I explore that is specific to clinical healthcare, is Edmund Pellegrino's internal morality of medicine substantiated in the clinical engagement. I describe the noteworthy aspects of his approach in which professional roles are integral to healthcare provision and these roles and ethical responsibilities of healthcare practitioners are derived internally from

the covenant with society and from those moral aspects internal to healthcare provision as a human endeavour. I show how the ends and particular virtues in Pellegrino's account are defined in terms of the unique clinical engagement. Another noteworthy feature of Pellegrino's account is that scientific knowledge and practical skills of healthcare practitioners are not divorced from the ends of the practice. In this way, the exercise of virtues respects the very nature of healthcare practice and protects the vulnerability of the patients. He remarks that all healthcare disciplines, whether clinical or non-clinical, share a common set of obligations and virtues apart from the obligations and virtues that are specific to that discipline (Pellegrino, 2001). Pellegrino notes that each branch in healthcare aims towards more immediate ends, characteristic of the scope of the practice, which should be identified. Additionally, although some healthcare branches that function outside the clinical encounter may tend to different ends, these nonetheless merge with the ends of clinical healthcare when those ends are used as part of helping the patient (Pellegrino, 2001). Lastly, I explain some of the concerns attributed to Pellegrino's internal views on morality and show how virtue concepts can alleviate some of these concerns.

The second account that I explore in chapter five is William Stempsey's special report on the virtuous pathologist. I argue that although there are several noteworthy elements in his account which I incorporate in the proposed virtue ethics framework, his account suffers the following shortcomings. Firstly, Stempsey makes empirical claims about virtues which are not adequately justified by empirical research. Secondly, his virtue account relies on the general *telos*[5] of healthcare practice, without making an attempt to identify the more immediate and specific ends that anatomical pathology serves. I put forward two solutions to overcome these shortcomings. The first solution is a conceptual one in which an appeal to teleological virtue-ethics concepts provides a broader analysis of the immediate ends of the practice, in light of which the role of the anatomical pathologist, the ethical responsibilities and the virtues can be determined. The second solution is an empirical one through which the (current) role of the pathologist, the immediate ends of pathology practice and the virtues that lead to the attainment of those immediate ends can be determined. These solutions together inform the virtue ethics framework that I aim to develop in this thesis.

[5] The word *telos* stems from the Greek words signifying an ultimate purpose or goal. In a virtue-based context, the concept of a *telos* symbolises the analysis of things, including professional practices, in view of their final purpose. I discuss this concept in further detail in chapter four of this thesis.

In the latter section of chapter five, guided by the noteworthy aspects previously identified in chapters four and five, I present the initial concepts of the virtue ethics framework which I propose in this thesis. In my virtue ethics framework, I propose the use of empirical research which I discuss in detail in chapter six, in addition to philosophical analysis for the development of a comprehensive and practical virtue ethics framework. Unlike Pellegrino and Stempsey's virtue approaches in which the identification of the immediate ends of the practice and the virtues needed for the attainment of those ends, are based on the so-called armchair theories, in my proposed virtue ethics framework, I employ empirical methods for the identification of the immediate ends of the practice and the virtues needed for the attainment of those ends. In summary, the initial noteworthy elements that are incorporated in the proposed virtue ethics framework have two distinct components, namely a normative component and an empirical component. The normative component draws on teleological virtue ethics and on the noteworthy aspects that MacIntyre and Stempsey advance. In the proposed framework, anatomical pathology is a practice in the McIntyrean sense, characterised by role-specific responsibilities and immediate ends specific to the activities internal to the practice and with a *telos* shared with all other healthcare disciplines. From such a viewpoint, I define a professional virtue as a character trait, the development and exercise of which makes the anatomical pathologist good in her relationship with the treating clinician, patients, and other colleagues and which is required (at least to a minimal extent) to serve the immediate ends and *telos* of the practice adequately. The internal goods which are inherent to the practice of anatomical pathology are designated, similarly to Stempsey's approach, as *collaboration in the anatomical pathologist-clinician-patient relationship* and *excellence in diagnostic skills*. The empirical component offers clear justification in determining the immediate ends of current anatomical pathology practice from the 'microscopic lens' of the anatomical pathologist, so to speak, and the unique relationships specific to the practice. Lastly, the empirical component also provides the justification for the selection of the professional virtues that will assist anatomical pathologists in advancing the immediate ends and the *telos* of the practice.

At this juncture, I wish to point out the scarcity in the ethics literature of theoretical perspectives pertaining to the various aspects involved in the establishment of the pathological diagnosis and the characteristic features of modern anatomical pathology. In consideration of this, in addition to the literature review, I make use of the findings from the empirical component of this thesis in the form of anonymous quotations in the development of various arguments throughout this thesis.

Chapter six is concerned with the empirical component of the thesis. In this chapter, I present the analyses of the views, opinions, and experiences of those in the practice to inform the normative component regarding the role of the anatomical pathologists within the healthcare team and the goals of the practice, the immediate ends of modern anatomical pathology practice, and the professional virtues that are characteristic to the practice. My aim in respect to professional virtues, is not to identify an exhaustive list of virtues but rather to ascertain which of those virtues should be developed and exercised that will serve as significant benchmarks for achieving the internal goods and the specific ends of the practice of modern anatomical pathology.

I present a few noteworthy themes that emerged from the empirical component of the study in chapter six. The first is in respect to the goals of the practice of modern anatomical pathology which are viewed by those in the practice as serving through the pathological diagnostic report (which constitutes the diagnosis) in guiding the treating clinician in the further management of the patient. Participants in this study revealed that there are various elements which constitute the pathological diagnosis, including a *confirmatory element* which is important in confirming that the right tissue sample has been submitted for diagnosis as well as confirming the intra-operative diagnosis, in the form of a frozen section; a *predictive element* - prognosing whether the disease is likely to respond to the treatment; *monitoring element*– monitoring treatment outcomes in terms of the response to various treatments. Furthermore, the participants ascribed a further *preventative element* to the pathological diagnosis in the form of early detection of disease (particularly malignant disease) through screening programmes and a research goal to the practice for the distribution of knowledge. These findings are significant in informing the immediate ends of the practice of anatomical pathology within the teleological virtue ethics framework proposed in this thesis.

The second significant theme arising from the study, which is not explicit in the ethics literature, pertains to the role of the anatomical pathologist within the healthcare team. The analysis of the findings in this study reveals that those in the practice of anatomical pathology view their role in the healthcare team as essential and fundamentally rooted in the diagnosis of the disease. By means of this diagnosis, they support and guide the treating clinician in the further management of the patient. This finding is valuable in informing the unique role-specific responsibilities and collaborative relationships in the virtue framework proposed in this thesis.

Regarding the identification of professional virtues, it is important to reiterate that my aim is to establish the virtues that are unique to the practice of modern anatomical pathology and are relevant in furthering the immediate ends identified for the practice. In view of this, a noteworthy finding arising from the empirical data of this study, which does not feature in Stempsey's list[6] of virtues of a good pathologist, is the broad virtue category of *wisdom and knowledge*. From this broad category, the character traits of *love of learning, open-mindedness* and *curiosity* were identified by the participants in this study as being important for a good anatomical pathologist to develop and exercise. From the broad category of the virtue of *courage*, the participants in this study considered that the character trait of *authenticity* is indispensable for the anatomical pathologist, followed by the character trait of *persistence*. Lastly, the participants considered that *teamwork* was another significant character trait that anatomical pathologists should possess. Worth noting from the analysis of the empirical data is that contrasting the virtues suggested by Stempsey, the participants in this study did not consider that the character traits under the broad virtue of *humanity*, were as relevant to their practice as they are to the clinical disciplines. This is a meaningful outcome as it illustrates that the professional virtues in the practice of anatomical pathology which are most significant in achieving the immediate ends of the practice are indeed, different than those in clinical disciplines given that there is a direct contact with the patient.

Following the detailed description of the significant themes that emerge from the empirical component of the study, the final pieces of the puzzle are to incorporate in chapter seven, the empirical findings of this thesis into a virtue ethics framework for modern anatomical pathology practice that is both cogent and action-guiding and to discuss the practical implications from the resultant empirically informed virtue ethics framework.

The empirical component and theoretical component are consolidated in a comprehensive and practical framework for modern anatomical pathology practice. Within this framework, virtues are central, and the principles of right action can be derived from the virtues. From a teleological viewpoint, modern anatomical pathology is a practice with internal goods specific to the practice, role-specific responsibilities and virtues, well-defined immediate ends, and a shared *telos* with all the other healthcare disciplines, namely the well-being of the patient.

[6] Stempsey lists the following virtues as important for the pathologist: honesty, benevolence, prudence, consistency, sensitivity, and courage (Stempsey, 1989). None of the virtue in his list appears from the category of the virtue of wisdom and knowledge.

Anatomical pathologists are the practitioners whose role-specific responsibilities in the practice are (directly) with the treating clinician and (indirectly) with the patient. The internal goods specific to the practice are represented by the *collaboration* in the anatomical pathologist-clinician-patient relationship and excellence in diagnostic skills. The immediate ends of the practice of modern anatomical pathology are designated as:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**
- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities.**

In the proposed empirically informed framework, a set of professional virtues are identified as essential in allowing anatomical pathologists to collaborate effectively with colleagues and clinicians. In this way, anatomical pathologists can achieve the immediate ends of the practice in particular, and the general *telos* of the wellbeing of the patient, which it shares with other healthcare practices. These virtues are *open-mindedness, curiosity, love of learning, intellectual courage, authenticity, and persistence.* From a virtue ethics perspective, anatomical pathologists need to be internally motivated to partake in collaborations with other members of the healthcare team in search for truth and knowledge pertaining to the pathological diagnosis, continued management of individual patients, and improvement of healthcare provision to communities. Within the framework that I propose, the pathological diagnostic process is viewed as a truth-seeking activity in respect to diagnostic truth pertaining to the disease process. The development and exercise of these professional virtues helps anatomical pathologists in responding virtuously, via the treating clinician, which enables them to be good in their specific role in the chain of healthcare provision.

Thus, to be a good anatomical pathologist, requires excellence in diagnostic skills coupled with the development and exercise of a set of virtues which allow for an effective relationship- of *collaboration*- with the clinician and other colleagues. Through the development and exercise of these virtues, anatomical pathologists become good *collaborators*, that guide the treating clinician in the selection of beneficial treatment and distribute knowledge of the disease process thereby benefiting the patient, which is the general *telos* which it shares with other healthcare practices.

In the remainder of the introductory chapter, I discuss the novelty of the thesis and the unique contributions that this thesis makes to the field.

1.1 Novelty of the thesis and contribution to the field

The unusual position for healthcare provision and unique role-specific responsibilities with the clinical disciplines and patients, respectively, coupled with the ethical deficiencies in current ethics literature, warrants the development of a virtue ethics framework specific to modern anatomical pathology.

To the best of my knowledge, this is the first empirically informed virtue ethics framework specifically developed for the practice of modern anatomical pathology. The empirical component provides meaningful insight into the routine practice of anatomical pathology, the recent developments in the practice and challenges faced in modern diagnostic service provision which are not apparent in current literature. Furthermore, critical elements of the proposed framework, including the identification of the immediate ends, the role-specific responsibilities of those in the practice and the justification of professional virtues, are informed by the views, opinions, and experience of those in the practice.

The virtue ethics framework developed in this thesis makes several unique contributions to the field. Firstly, it provides a tangible way of implementing virtues in the practice of anatomical pathology, thereby challenging the major critique levelled against virtue-based approaches, that it is not action-guiding. Within a teleological ethics framework founded on virtues, the role-specific responsibility of the anatomical pathologist is directly with the treating clinician and indirectly with the patient. Within this clearly established role, right action is defined as that which is virtuous, and which enables the attainment of the immediate ends of the practice and furthers its *telos*. Wrong action is defined as that which is vicious, and which detracts from the immediate ends of the practice and from its *telos.*

Secondly, this virtue ethics framework bridges the gaps identified in the application of the principle-based approach to the practice of anatomical pathology. In the proposed framework, ethical activity in professional practice in anatomical pathology is acknowledged as a human endeavour as it is afforded a more human dimension. Professional practice is understood and evaluated as a human task comprising various cognitive and collaborative activities which focus both on technical excellence, as well as on personal excellence in the development of virtuous character and internal motivations. Furthermore, anatomical pathology practice is viewed in terms of unique relationships within a practice, with well-determined intermediate ends and ultimate ends. An important result of this proposed framework is the establishment of a well-defined role within the chain of healthcare provision, which has, until now, functioned

within the blurred lines between clinical healthcare and laboratory healthcare. In this way, anatomical pathologists have role-specific responsibilities, to individual patients by assisting the treating clinician to provide the most beneficial treatment and to communities by distributing knowledge of the disease process.

The set of professional virtues identified in this thesis, namely, love of learning, open-mindedness, curiosity, intellectual courage, authenticity, and persistence, are significant in highlighting that the virtues required for those in the practice of modern anatomical pathology differ from the virtues required from those healthcare practitioners directly involved in patient care. In this way, the development and exercise of these professional virtues are relevant to the current scope of modern anatomical pathology practice and assists anatomical pathologists in achieving the immediate ends of the practice which furthers the *telos* of the practice.

Thirdly, a significant practical implication resulting from this thesis relates to the recommendation for moral education for specialist training in anatomical pathology practice with the view of shaping the early professional identity of the anatomical pathology registrars and encouraging the development of the set of professional virtues (which ensures effective *collaboration*) in the anatomical pathologist-clinician relationship and in the relationships with colleagues in the field. Lastly, in the proposed virtue ethics framework, the principles of biomedical ethics are accommodated within the framework and serve as helpful points of departure in ethical deliberation in the practice of modern anatomical pathology. From such viewpoint, virtues play a central role, and the principles of right action are derived from these virtues.

CHAPTER 2: ANATOMICAL PATHOLOGY AS A HUMAN TASK AND THE NEED FOR ETHICS

2.1 Introduction

In this chapter, I provide a characterisation of anatomical pathology that informs the ethical debates in subsequent chapters.

Anatomical pathology[7] is an interesting practice which can be viewed as "both a medical specialty and an investigative scientific discipline" (Pena and Andrade-Filho, 2009:127). The practice of anatomical pathology has an unusual placement for healthcare provision and includes several distinctive features which are not apparent in the current ethics literature.

The first distinctive feature of the practice is rooted in the various interpretive and analytical human tasks involved in the establishment of a pathological diagnosis[8], based on tissue[9] removed from the patient. The human tasks involve the evaluation of the various macroscopic and microscopic findings and the integration of these findings with knowledge from a wide field, including the basic sciences and clinical knowledge from various healthcare specialties (Pena and Andrade-Filho, 2009). The evaluations and interpretations are done in relation to the clinical findings which are provided by the treating clinician on the pathology form that accompanies the biopsied specimen. Once the correlation between the microscopic findings and the clinical findings is done, the final pathological diagnosis is established by the anatomical pathologist, and it is conveyed to the treating clinician in a clear and intelligible format by means of a pathological diagnostic report. The final diagnosis is written-up in accordance with a set of prescribed classifications and with an appreciation on the part of the anatomical pathologist of the "consequences of a diagnosis and the expected conduct derived from it" in terms of the further management of the patient (Pena and Andrade-Filho, 2009: 129). The various human tasks that are involved in the diagnostic process are complex and range from those requiring analytical or cognitive skills, such as "perception, memory,

[7] Anatomical pathology is a branch of pathology, also known as anatomic pathology or histopathology. Other branches of pathology include forensic pathology (determining cause of death by examining cadavers) and clinical pathology (establishing the diagnosis of a disease by examination of bodily fluids such as blood and urine) which together with anatomical pathology fall under the umbrella of pathology.

[8] The pathological diagnostic process begins once the tissue specimen removed from the patient is sent to the pathological laboratory and concludes with the establishment of the final diagnosis, which is shared with the treating clinician by way of a signed pathology report.

[9] The tissue is removed from the patient by a surgical procedure, otherwise known as a biopsy, which entails the removal of a small sample of the diseased tissue.

verification and hypothesis creation", to the development of effective communication skills that ensure that adequate "arguments are provided in defence of the diagnostic conclusion" (Pena and Andrade-Filho, 2009: 125). Importantly, these various interpretive human tasks involved in the diagnostic process necessitate an interplay between the various tasks which significantly contribute to ensuring an accurate, beneficial, and timely diagnosis is achieved (Pena and Andrade-Filho, 2009). These distinctive human tasks are however not identified with ease in current ethical debates as these are largely overshadowed by the technical laboratory aspects[10] of the practice.

The second distinctive feature of anatomical pathology practice is that the pathological diagnostic service is rendered from an unusual position for healthcare provision which is largely in the absence of patient contact. To compensate for the fact that the anatomical pathologist rarely sees the patient, an important collaboration with the treating clinician develops. This collaboration is necessary for the integration of relevant clinical information and microscopic tissue changes in a diagnostic algorithm, which culminates in the establishment of a final diagnosis. The correct interpretation of the data provided by the treating clinician (who has direct contact with the patient) with the microscopic changes in the tissue are fundamental in the establishment of the correct diagnosis and the selection of an appropriate management strategy for the patient. Conversely, the correct interpretation of the final diagnosis in the pathology report by the clinician is essential in guiding the further management of the patient accurately. This implies that effective collaboration and proper communication between the anatomical pathologist and the clinician is fundamental and has a significant impact on the treatment outcomes for patients. Although this collaboration is acknowledged in ethical discussions pertaining to anatomical pathology practice, the nature and significance of this collaboration is rarely discussed in depth in the literature.

The third distinctive aspect pertaining to anatomical pathology practice that is overlooked in current ethics literature is that, unlike other medical specialities that have clearly established goals and well-defined roles within the healthcare team, anatomical pathology practice takes

[10] Laboratory aspects refers to the technical tasks which consists of, amongst others, the embedding of the selected tissue samples in an embedding medium, usually wax, followed by the cutting of the microscopic sections, routine staining of the slides with haematoxylin and eosin and other tissue histochemical and immune-histochemical staining techniques, the correct labelling and storing of the tissue specimens. Laboratory aspects also include ensuring patient confidentiality during the various laboratory tasks.

place within the blurred lines between laboratory medicine and clinical patient care. Further to this, due to the various novel developments in laboratory molecular techniques, which have made the personalised approach to patient care possible, the nature of the involvement of the modern anatomical pathologist is steadily expanding in terms of the management of the patient. However, this expanding role within healthcare provision and the goals and ethical responsibilities that arise from the expanding role remain unclear in current ethics literature.

Given the various human tasks involved in the pathological diagnosis and the unusual collaborations required in the practice of anatomical pathology which are of consequence for the accuracy and timeframe of the diagnosis and thus for the management of the patient, it is surprising that these important aspects are not taken into consideration in current laboratory medical ethics literature. Furthermore, it is surprising that little work examines the current role and ethical responsibilities of the modern anatomical pathologist in the healthcare team due to its expansion in the era of the personalised medical approach to healthcare. These are indeed significant shortcomings; in the absence of an understanding of the nuances of the practice, the changing role in healthcare provision and unique relationships involved, ethical issues may not be adequately addressed.

My overarching aim in this chapter is to provide an initial context for understanding the various human tasks involved in the pathological diagnostic process and to explore how these tasks and the unique relationships influence the accuracy, benefit, as well as the timeline of the pathological diagnosis. This is an important starting point which will provide perspective for the discussion, and which draws attention to ethical issues that form the basis for subsequent chapters. These issues concern the ethical deficiencies in current ethical assessment in anatomical pathology practice. I aim to show, in subsequent chapters, how the dominant principle-based approach which comprises the application of the principles of respect for autonomy, non-maleficence, beneficence and justice and which permeates most, if not all, ethical discussions in the practice are insufficient, on their own, to address the various nuances of the practice. I further aim to show how the human tasks involved in the practice call for the supplementation of principle-based ethics with an ethical theory that focuses on relationships, internal motivations, and the character of the anatomical pathologist. Such a supplementation, I argue, should also take into consideration the unusual placement and unique relationships in pathology practice, the expanded functions of anatomical pathologists within the healthcare team and the various human tasks involved in the pathological diagnostic process, which have thus far been poorly represented in the literature.

In section 2.2 of this chapter, I highlight that although the pathological diagnosis is underpinned by various indispensable technical tasks, the human aspects of the practice and unusual relationships are equally significant in ensuring a beneficial diagnosis for the patient and should not be neglected in the ethics literature. I do this by describing the evolution and significance of the various tasks involved in the pathological diagnostic process. In section 2.3, I draw attention to the effect of recent technological developments and the unusual relationships in anatomical pathology on the accuracy and relevance of the pathological diagnosis for the further management of the patient. I lastly, draw attention to the need to explore the current role those anatomical pathologists play within the healthcare team which is superficially described in current ethics literature.

A detailed understanding of the various tasks involved in the pathological diagnostic process and the appreciation of the unique placement of the practice is an important starting point as it provides insight regarding the type of ethical theories that are most suitable to apply to this practice.

2.2 Anatomical pathology as a human task and the significance of relationships

I begin this section with a brief overview of the origins of the discipline of pathology and explore the various phases of the diagnostic process with specific focus on the interpretive human tasks and the unique relationships that characterise the practice of anatomical pathology.

The development of pathology as a specialty is linked to the invention of the microscope which interestingly "was only reluctantly accepted by physicians at the time of its invention in 1590" (Hajdu, 2011: 201). The development of the microscope had a significant impact on the discipline as:

> Concepts were re-focused from organ, to tissue, to cell, ever smaller, effecting the birth of histopathology that has held sway in pathology for just a century and a half (Van den Tweel and Taylor, 2010: 10).

The origins of pathology can be traced back to the nineteenth century with the introduction of the microscope and the influential publications by Rudolf Virchow entitled *Die Cellularpathologie,* which changed the landscape of pathology (Breathnach, 2002).

In modern healthcare provision, the pathological diagnosis is considered indispensable for the confirmation of various types of diseases[11]. In the absence of a pathological diagnosis, treatment cannot commence. This diagnostic process can be divided into three distinct phases, which for the sake of conciseness and clarity I present in bulleted form below:

- Pre-analytical phase - in this initial phase, the attending clinician or surgeon surgically removes, prepares, and sends the biopsied tissue specimen to the laboratory accompanied by a pathology request form which is received by the laboratory, documented, and processed for further diagnostic procedures.
- Analytical phase - refers to the processing of the received tissue specimen as well as diagnostic procedures including the interpretive macroscopic and microscopic analysis.
- Post-analytical phase - refers to the communication of the diagnosis (by means of the pathology report) to the treating clinician (Alavi, Khan, Saadia and Naeem, 2020: 22).

Several of the tasks which need to be performed in the pre-analytical and analytical phases are technical in nature and require a laboratory setting. These technical tasks of the pathological diagnosis begin once the tissue sample (which is surgically removed by the attending clinician or surgeon) is received by the pathology laboratory. The anatomical pathologist examines the submitted specimen macroscopically and, based on the medical history provided on the pathology request form, selects the representative tissue samples for further microscopic examination. The initial laboratory processing, which represents the technical tasks of the pathological diagnosis of the selected tissue samples, is performed by a medical technologist. This technical task consists of the embedding of the (selected tissue) samples selected during the macroscopic examination in an embedding medium, usually wax, followed by the cutting of the microscopic sections. The microscopic sections procured are in this way thin enough to view (one cell layer) under the microscope after mounting the procured section on a glass slide. Following the procurement of the microscopic sections, the slides are routinely stained by a medical technologist with haematoxylin and eosin. This stain provides the anatomical pathologist with a precise microscopic view of the various cell structures, organelles and extra-cellular components involved in the disease process. Various other tissue histochemical and

[11] Diseases that require a pathological diagnosis include, certain infectious diseases, autoimmune disease, neoplastic (cancerous) diseases, metastatic diseases, metabolic diseases, and degenerative diseases.

immune-histochemical staining techniques are also applied, on a case-by-case basis, to further identify cell lineages, cell products, tissue morphology and morphological changes in the tissue samples which are often pivotal in establishing a microscopic diagnosis.

Once the tissue has been prepared by the various laboratory techniques in the pre-analytic phase, the interpretive human tasks in the analytical and post-analytical phases of the pathological diagnosis commence. The further exploration of these human tasks is valuable in establishing that the accuracy, value, and timeframe of the diagnostic process is heavily reliant on various interpretive human factors and relationships in the form of a clinico-pathological correlation. Such insight into the importance of human tasks and relationships in the clinico-pathological correlation will enhance the way ethical issues are discussed in the practice. To this end, Pena and Andrade-Filho (2009) put forward a model for understanding how pathologists arrive at a diagnosis in which they elaborate on the human aspects of the process and which I explore in detail in the section below. According to Pena and Andrade-Filho, the human tasks of the pathological diagnostic process can be divided into four distinct domains, which for the sake of clarity, I present in bulleted form below:

i. cognitive domain
ii. communicative domain
iii. normative domain
iv. medical conduct domain (Pena and Andrade-Filho, 2009).

The first domain of human tasks of the diagnostic process consists of the cognitive domain. This domain relates to the perceptions of the pathologist and analysis of what she observes macroscopically and microscopically once the tissue sample has been prepared, and the generation of an initial hypothesis or differential diagnosis based on these findings during the analytical phase (Pena and Andrade-Filho, 2009). Once these clues are collected from the tissue sample, they are interpreted by use of memory against a "previously learned picture of the disease" (Pena and Andrade-Filho, 2009: 125). It is through the integration of the various cognitive analytical processes that the anatomical pathologist formulates an initial hypothesis. Pena and Andrade-Filho (2009: 125) explain how the pathologist integrates these processes which leads to the creation of the initial hypothesis by stating that:

> Hypothesis creation is a highly individualistic process and depends on mastery of the dynamic models of structure, function, and response to stimuli that comprise the knowledge from basic science disciplines such as anatomy, biochemistry, physiology,

genetics, basic pathology, and microbiology as well as clinical medicine, surgery and dermatology.

The generation of the hypothesis requires the evaluation and integration of "vast fields of knowledge and expertise from various medical disciplines" (Pena and Andrade-Filho, 2009: 125). Aspects pertaining to the complex skills and knowledge required for the establishment of a pathological diagnosis in the cognitive domain is generally neglected in the literature but also within the healthcare team, as one of the anatomical pathologists participating in this study explains:

> *I think it [anatomical pathology practice][12] is undervalued because people do not realise the skill that we need to have in order for us to integrate all the knowledge that we have into a [microscopic][13] slide, generate a [pathological][14] report, put all things together, people can't see that* (anonymous quote - study participant).

The interpretive aspect of the construction of the differential diagnosis is a significant aspect of the cognitive domain. This is because the anatomical pathologist does not 'see', for example, cancer in the brain tissue prepared on the microscopic slide as an entity under the microscope. Rather she sees the specific cellular changes indicative of cancer of this type of tissue. In this case, she sees tissue showing "marked hypercellularity, nuclear atypia, microvascular proliferation, and necrosis…palisading of tumor cells around necrotic foci", which fit in with the previously gained knowledge of the characteristic features of a particular cancer of the brain known as a glioblastoma (D'Alessio, Proietti and Scicchitano, 2019: 2). However, these observations and the correlation with the learnt characteristic of the specific pathology would not suffice to defend a final and definitive pathological diagnosis. A further requirement is the correlation of these findings with the clinical information received from the treating clinician, including the history of the disease, signs and symptoms experienced by the patient and other special investigations. Once the microscopic interpretations are correlated against the clinical findings, the final diagnosis of glioblastoma can be confirmed and defended, based on the above-mentioned parameters. Interestingly, both the anatomical pathologist and the clinician

[12] My addition in brackets.
[13] My addition in brackets.
[14] My addition in brackets.

construct their pathological and clinical diagnosis respectively in a similar manner as King explains:

> Both start from 'data', 'building blocks', 'observations', 'first order inferences' or whatever terms we wish to use; and by a series of inferences of varying complexities arrive at conclusions we call 'diagnosis' (King, 1967: 331).

Although the steps may be similar, it is important to highlight a key difference between the way in which the clinician and the anatomical pathologist arrive at a final diagnosis; namely that the former has direct contact with the patient. This implies that the clinician sees her patient, can perform a physical examination of the patient and is able to speak to the patient and gather the essential 'data' in the form of history of the disease, family history, signs and symptoms and any other relevant information which she believes could be noteworthy in the diagnostic process. This data, otherwise known as the clinical information, is valuable for the anatomical pathologist as it forms part and parcel of the generation of the initial hypothesis which needs to be incorporated in the cognitive domain of the pathological diagnostic process (Pena and Andrade-Filho, 2009). This feature of the cognitive domain requires the integration of both the "pathological strategies (searching for additional histological evidence, ordering special stains and immunohistochemistry) and parapathologic (ie., searching clinical, laboratory, radiologic data) strategies" which will shorten the list in the differential diagnosis (Pena and Andrade-Filho, 2009: 125). This clinical picture is crucial for the pathological differential diagnosis or hypothesis creation, as an anatomical pathologist that participated in this study explains:

> *Pathology is very interesting because what could be a benign tumour in a two-year old, could be a malignant tumour in a seventy-year-old. The same thing that looks exactly the same. So, if you do not have that communication for example, if you do not know how old the patient is, if they [the clinician][15] have not written it for you on the form [pathology request form][16] and you do not communicate with them and say, it looks like this, but how old is this patient? Then, just that little information then switches the entire diagnosis* (anonymous quote - study participant).

[15] My addition in brackets.
[16] My addition in brackets.

However, given that anatomical pathologists are heavily reliant on a laboratory setting, the direct contact with the patient is lost and with that, the access to the clinical examination of the patient and clinical information regarding the patient is similarly lost. Anatomical pathologists thus find themselves in a position of dependency on their clinical counterparts. This is a problematic position as, ideally, diagnosing the disease process should be done through direct contact and communication with the patient. This is because disease entities develop in the biological context of individual patients, which entails that the patient might have variations in the clinical signs and symptoms that they present with, both macroscopically and microscopically.

To better understand the constrained position of the anatomical pathologist, one needs to appreciate that many clinical factors may have a direct influence on the diagnostic accuracy and capacity of the anatomical pathologist, in the absence of which, additional time, effort and resources are required to arrive at an accurate diagnosis. Several factors, amongst others, the family history of the patient, medication taken by the patient, comorbidities, patient habits, the age, and the gender of the patient, and other environmental factors, can have a significant influence on the way the disease manifests itself. All these factors are of interest and significance for the anatomical pathologist diagnosing the disease. Although certain disease entities are straightforward to diagnose and only require the examination of the histologically prepared slides, the diagnosis of a significant number of diseases require additional input from the clinical information.

As a case in point to draw attention to the many parameters which can influence the diagnosis and influence the usefulness of the pathological report, let us consider the following case. An adult patient presents to the treating clinician with a single white smooth non-removable plaque on the oral mucosa. To diagnose the lesion and accurately treat it, the clinician takes a biopsy of the lesion and submits it for pathological diagnosis. Upon microscopic evaluation, an excessive production of keratin is noted by the anatomical pathologist. The clinical description of a non-removable plaque received on the pathology form from the treating clinician excludes certain common acute infections which manifest with removable plaques. It would be helpful at this initial stage of the diagnostic process to have additional clinical information on the systemic health status of the patient including any oral habits (such as the use of tobacco) or the presence of local factors (such as a sharp tooth) which may irritate the site and manifest with excessive keratin production. If the patient is immune compromised, special microscopic investigations will be required to exclude a superficial chronic opportunistic infection which

may manifest with excessive keratin production. The further management will then be pharmaceutical. The description of the smooth surface excludes a diagnosis of lesions with irregular surfaces such as a viral wart and proliferative verrucous leucoplakia,[17] the latter which has a high risk of cancer development and must be removed surgically. The presence of a sharp tooth will support a final diagnosis of a friction related cause and the lesion will be resolved without further treatment if the mechanical friction is addressed appropriately. A history of tobacco use will demand a careful study of more microscopic sections of the tissue to grade abnormal cell maturation, which determine the stage of progression towards cancer. These cell changes mandate patient counselling and regular follow-up visits to identify cancerous growths at an early stage in their development. This case demonstrates how inappropriate reasoning, which often is the result of inadequate clinical information, may impact negatively on the selection of an appropriate management regime.

This case also illustrates that the anatomical pathology practice cannot take place efficiently in a vacuum, away from the patients that are being diagnosed. To compensate for this, an auxiliary relationship develops between the treating clinician and the anatomical pathologist, with the former having access to all the relevant clinical information regarding the patient. Anatomical pathologists then, become dependent on their clinical colleagues, who serve as their eyes and ears in terms of clinical input. Troxel and Sabella (1994) also highlight the significance of the bipartite communication between the pathologists and the treating clinician; they assert that one important constituent of this communication is constituted by adequate clinical information-sharing which ensures the best possible diagnosis. Clinicians should, ideally, convey all relevant information regarding the patient to the pathologists via the pathology form which accompanies the biopsied specimen and, in this way, assists pathologists with the clinico-pathological diagnostic process. However, this ideal situation is not often implemented in practice, and pathologists may at times, be confronted with having to diagnose cases with limited or even complete lack of clinical information (Nakhleh, Gephardt and Zarbo, 1999). This flaw in communication is likewise reflected in the empirical findings in this thesis, in which the lack of information sharing in the clinician-anatomical pathologist relationship is identified as a significant challenge in the establishment of the pathological diagnosis in the

[17] Leukoplakia refers to a "white spot or patch on the mucous membranes in the mouth (for instance, inside the cheeks, on the gums, on the tongue) that may become cancerous" (Grayston, 2005: 1).

current practice of modern anatomical pathology. I discuss this challenge in further detail in chapter six of this thesis.

The importance of such clinical information is also brought to light by Rosai who writes:

> They [the clinicians][18] should know that a microscopic diagnosis is a subjective evaluation that acquires full meaning only when the pathologist is fully cognizant of the essential clinical data (2011: 3).

The clinical information serves as a key element which assists the anatomical pathologists in the verification of the initial hypothesis. In other words, receiving the relevant clinical information or clues from the treating clinician is essential in ensuring that the final diagnosis is accurate and useful for the further management of the patient (Pena and Andrade-Filho, 2009). In the absence of this clinical information, the anatomical pathologist may have to make use of additional resources, in the form of additional laboratory techniques which will also increase the time that it takes for the pathologist to arrive at the final diagnosis, as is explained by the following quote:

> *You [the anatomical pathologist][19] need clues from the clinician as to what they expect the condition to be; otherwise, you are going to do a heck of a lot of tests to search for a needle in a haystack. At least if you get the appropriate information from the clinician, you know in which haystack to look for the needle (*anonymous quote - study participant*).*

It is precisely this important relationship (which unfolds during the pre-analytical and post-analytical phases) that is largely overlooked in the current principle-based ethical debates in anatomical pathology practice, which concentrate predominantly on the analytical phase of the practice. This shortcoming is significant, as anatomical pathology practice is defined and confined by this relationship. In the absence of an evaluation and incorporation of this relationship within the ethical approach, ethical issues in the practice may be only partly addressed. This is because the "four general principles in medical ethics (respect for autonomy, non-maleficence, beneficence and justice) apply in the field of Pathology but they are clumsy, because they are designed for face-to-face patient care" (Serafimov, 2011: 1).

[18] My addition in brackets.
[19] My addition in brackets.

In the absence of direct patient contact, anatomical pathology practice requires a direct collaboration with the treating clinician, as this study participant explains:

> *The thing about our speciality [anatomical pathology][20] is that we do not work in a vacuum. That is important. We work in collaboration. It is a collective thing* (anonymous quote - study participant).

Thus far, in this section, I have explored the various facets involved in the cognitive domain of the pathological diagnostic process and the significance of clinical information and the significance of the relationship with the clinician during this initial task. The next equally important step which I explore is the communicative domain. It is during the communicative process that the pathologist describes and interprets the various aspects of the cognitive domain and conveys these findings to the treating clinician in the form of a written pathological report. By means of this report, the anatomical pathologist communicates the diagnosis of the disease to the clinicians, in such a way so as to guide them optimally in selecting the most appropriate treatment. In difficult cases or in cases where the clinical and pathological diagnoses do not correlate, clinicians and anatomical pathologists should consult with each other, to corroborate the final diagnosis. This presupposes a mutual relationship between anatomical pathologists and clinicians, that bridges the gap between anatomical pathologists and patients, a relationship which has a significant influence on patient outcomes.

The use of adequate terminology, conventional classification and the use of argument is important during this stage, as the conclusions made by the anatomical pathologist in the form of a final diagnosis may be challenged by the treating clinician, by other pathologists or during the presentation of the case or publication of the case (Pena and Andrade-Filho, 2009). The pathologist must be able to justify why the conclusion she has drawn from the analysed data (in the form of macroscopic findings, microscopic findings from the biopsied tissue specimen and the correlation with the clinical information) that led to her conclusion (in the form of a final diagnosis) is correct (Pena and Andrade-Filho, 2009).

Much the same as a philosophical argument, the anatomical pathologist must show that the final diagnosis is "a valid construction derived from the data" (Pena and Andrade-Filho, 2009: 127). To illustrate the type of argument that is required to motivate how the anatomical

[20] My addition in brackets.

pathologist arrived at the final diagnosis, I make use of Pena and Andrade-Filho's example of a typical macroscopic diagnosis of pneumonia for which the arguments proceed as follows:

> The lung was macroscopically changed (data), as described, so this is possibly pneumonia (conclusion), because the macroscopic findings in pneumonia cases are frequently described as such (warrant), based on autopsy studies of pneumonia cases (backing) (Pena and Andrade-Filho, 2009: 126).

There may be instances in which the macroscopic and microscopic data as well as the clinical information does not provide sufficient information to reach a final diagnosis with absolute certainty. In such cases, the pathologist includes as part of the final diagnosis a 'qualifier element' which conveys the level of certainty or lack thereof of the final diagnosis or conclusion (Pena and Andrade-Filho, 2009: 126). Such qualifiers are expressed in the form of specific terms such as "probably, probably not, possibly, possibly not, certainly, and almost certainly" (Pena and Andrade-Filho, 2009: 126). These qualifiers should be interpreted by the treating clinician and should reveal the "level of certainty in a diagnostic conclusion" (Pena and Andrade-Filho, 2009: 126). During the communicative domain, language and mutual understanding between the anatomical pathologist and the treating clinician is pivotal; misunderstandings in this process can negatively impact the outcomes of the patient. The importance of effective communication between the pathologist and the clinician is overlooked in the ethics literature. Understanding the relationship and the unique subtleties of the communication between the pathologist and the clinician are important, as Barron (1993: 383) explains "trust, good communication, and collaboration between pathologist and clinician are essential; anything that harms this link is ethically wrong because it harms the patient".

Although the communicative domain is not an evident component of the diagnostic process, it is however a component that can easily affect the outcome for the patient. A breakdown in communication and understanding of the language used in the pathology report could easily cause the treating clinician to misinterpret the report. Adequate communication of the findings to the clinician in a way that is helpful can thus be as important as the cognitive process of the diagnosis. Part of the communicative domain would also include talking to the clinician in instances of rare cases or in cases in which the clinical information does not match the diagnosis.

Apart from the communicative domain, the practice of anatomical pathology is also guided by a set of specified rules and norms, particularly in respect to technical norms and the use of

classification of diseases. This third domain is normative, driven by a set of rules and norms that are based on empirical knowledge and on the pathological diagnosis process, "these norms apply to specifying and justifying rules that guide the diagnosis of the pathologists as well as social norms and ethical norms in dealing with patients and colleagues" (Pena and Andrade-Filho, 2009: 129). As Pena and Andrade-Filho (2009: 129) further explain in terms of classification, the most appropriate classification to be used, for example, for a cancer would be one that "allows us to best comprehend how the neoplasm is expected to behave".

The final aspect of the diagnostic process, before the final diagnosis is conveyed to the treating clinician, is the medical conduct domain. This is an essential evaluative step that ensures that "the pathologist clearly knows the consequences of a diagnosis in the management of the case, and the report should make clear both the diagnosis and the expected conduct derived from it" (Pena and Andrade-Filho, 2009: 129). At this stage of the diagnosis process, the anatomical pathologist evaluates whether all the various domains have been satisfied or whether further laboratory investigations should be requested or perhaps further consultation with the treating clinician or with other colleagues is warranted (Pena and Andrade-Filho, 2009). A crucial aspect of the medical conduct domain is whether the communication is unambiguous and makes clear the diagnosis as well as the expected management that arises from the diagnosis (Pena and Andrade-Filho, 2009). The consequences of the diagnosis must be well understood, and this implies that the final diagnosis is communicated in a manner that will benefit the further management of the patient (Pena and Andrade-Filho, 2009).

In sum, from the time of receipt of the biopsied specimen by the pathology laboratory to the communication of the final diagnosis to the treating clinician for the further management of the patient, various interpretive human tasks are performed as part of the pathological diagnostic process. Hence, the diagnostic process requires:

> The (1) cognitive capability to recognize a histological finding and to establish a conclusion that must be integrated with (2) the communicative ability to appropriately describe and interpret findings and to provide adequate warrants to a conclusion with (3) obedience to appropriate normative guidelines and to (4) evaluate the whole task with respect to the conduct that may be instituted because of the diagnosis (Pena and Andrade-Filho, 2009: 131).

The various facets of the diagnostic domain are dependent on effective discourse and collaboration between the pathologist and the treating clinician. This partnership is of

significance for the outcome for the patient and is underrepresented in current ethics literature (Pena and Andrade-Filho, 2009).

As a case in point, to summarise the investigative aspects involved in anatomical pathology practice, let us consider the work of a criminal investigator, which bears many similarities to the work of an anatomical pathologist. A criminal investigator relies heavily on clues and information from the scene where the offence was committed to establish potential suspects in the case; much the same as the anatomical pathologist relies heavily on clues and information from the clinical scene (via the clinician) to establish a diagnosis. As part of the inquiry, a criminal investigator gathers evidence from the scene of the crime, such as fingerprints and samples of DNA (deoxyribonucleic acid), as well as statements from eyewitnesses which are important in providing information regarding the crime. This is much the same as the diagnostic inquiry of the anatomical pathologist who collects evidence in the form of specimens, the molecular identification of disease, and eye-witness accounts (in this case, these are the clinical colleagues) which convey essential details regarding the disease. Lastly, as part of the routine practice of a criminal investigator, reports are prepared which serve to inform criminal trials. This is much the same as part of the routine practice of anatomical pathology, where pathologic reports are prepared which serve to inform the clinical management of the patient. The outcome of the criminal trial is influenced by the quality of the information presented by the criminal investigator, much the same as the quality of the treatment is influenced by the information and collaborations with the treating clinician. While the steps involved in a criminal investigation are commonly known and better understood, the steps involved in anatomical pathology practice are unfamiliar and anatomical pathologists are often-undervalued members of the healthcare team.

Having mapped the various human tasks that form an integral part of the pathological diagnostic process, in the next section, I turn my attention to consider in more detail the influence of recent improvements in biomedical technology on the current practice of anatomical pathology. These aspects are important to consider as the anatomical pathologist is becoming increasing involved in healthcare provision, especially with the advent of the personalised medical approach. However, this aspect is poorly emphasised in ethical discussions pertaining to the practice.

2.3 The changing role of the modern anatomical pathologist in the healthcare team

Progress made in modern anatomical pathology is consistent with advances in modern medicine which has seen a shift from a generic approach to treating disease to an individualised, personalised approach.

> It is more important to know what sort of person a disease has, than to know what sort of disease a person has – attributed to Hippocrates (Casadevall and Fang, 2014: 390).

This above cited passage suggests that the observation that different people will react in different ways to similar diseases was recognised since Hippocratic times. More recently though, breakthroughs have been made in identifying the specific genetic constitution of individual patients which accounts for the varied responses to the diseases and has implications for the treatment modalities. This has made it possible to utilise diagnostic testing for optimal individualised or biological treatment, based on specific molecular and cellular analysis of the diseased tissue (Orlandi, 2016). This personalised approach is, in turn, increasing the need for diagnostic pathology services, and it is estimated that approximately seventy percent of medical diagnoses rely on pathology laboratory diagnosis (Beastall, 2013). In recent years, the introduction of modern ancillary laboratory techniques, amongst others:

> Tissue microarrays, molecular technologies and next generation gene sequencing, has allowed for the rapid, accurate and reproducible generation of vast quantities of genetic and molecular information on tissue removed from a diseased patient (Orlandi, 2016: 5).

In sum, the practice of anatomical pathology is progressing, together with advances in modern medicine and these progressions are significantly impacting the practice of anatomical pathology. This has allowed for the broader participation of anatomical pathologists in the management of patients within the healthcare team (Underwood, 1987).

I now consider the effect that modern ancillary laboratory techniques have on the practice of anatomical pathology. It is important to highlight that these novel techniques are not only impacting on the diagnostic capacity and accuracy of the practice of anatomical pathology but are also changing the role and responsibility that the anatomical pathologist has within the healthcare team.

As a result of these novel techniques, the anatomical pathologist is now able to not only diagnose the disease, but also offer a prognosis, assist in risk stratification and screening for certain diseases and monitor the treatment outcomes of the patient, thereby facilitating a more comprehensive form of patient care. This shift is exemplified in the case of cancer treatment, where anatomical pathologists currently assist clinicians to "stratify patients according to their potential for positive response to the new biological treatments, identify and quantify appropriate targets to improve the new diagnostic aspect and treatment of patients, monitor the progression of the disease and offer a prognostic framework" (Orlandi, 2016). These biological treatments are made possible due to the identification of biological markers, otherwise known as biomarkers, which can be defined as "cellular, biochemical or molecular alterations that are measurable in biological media such as human tissues, cells, or fluids" (Mueller, 1991: 3). "More recently, the definition has been broadened to include biological characteristics that can be objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacological responses to a therapeutic intervention" (Mayeux, 2004: 182).

In breast cancer, for example, biomarkers have emerged as important determinants of the expression of oestrogen receptor (ER) and cell surface receptor tyrosine kinase human epidermal growth factor (HER2) (Mirtavoos-Mahyari, Khosravi and Esfahani-Monfared, 2014). These biomarkers play a crucial role in selecting targeted therapies by the treating oncologist, which are aimed at effectively inhibiting tumour growth and spread, thereby providing the patient with targeted therapy (Mirtavoos-Mahyari, Khosravi and Esfahani-Monfared, 2014). Moreover, the discovery of breast cancer susceptibility genes, amongst others, BRCA1, BRCA2, TP53, have unlocked a new era in the management of the disease (Mirtavoos-Mahyari, Khosravi and Esfahani-Monfared, 2014). Identification of mutations of these genes, through new sequencing technologies, provide data for the roll-out of targeted gene-specific treatment options, advice on the need for prophylactic contra-lateral mastectomy and gene-based identification of family members at risk (Apostolou and Fostira, 2013). Nonetheless, the incorporation of these novel biomarkers into the practice of anatomical pathology practice, brings with it several ethical issues which are not apparent in the literature and which I will expand on further in chapter five.

What is more, these emerging biomarkers are continuously improving the diagnostic capacity and accuracy of the pathological analyses and contributing to a radical shift in medicine, moving from a primarily reactive model towards a more proactive model characterised by

Prediction, Personalisation, Prevention and Participation (Gu and Taylor, 2014). As a result, of this fundamental change in medicine, the modern anatomical pathologist plays an indispensable role in the chain of healthcare provision; particularly at the stage of determining the diagnosis but also in determining the prognosis and to an extent, guiding treatment modalities, particularly in the case of malignant disease. Anatomical pathologists also play a role in intra-operative diagnosis in the form of a frozen section; this type of immediate diagnosis guides the surgeon as to whether the tumour has been resected with wide enough margins.

Unfortunately, these great achievements are not receiving the deserved attention from ethicists, with pathologists still being stereotyped "as basement dwellers, removed from direct patient contact, working with only the dead and inert…this stereotype of pathologists as sheltered in their subterranean quarters, issues of medical ethics might seem a distant consideration" (Cocks, 2016: 761). Furthermore, the role and ethical responsibilities of the anatomical pathologist within the chain of healthcare provision lacks clarity in current ethics literature.

Thus far, this section has drawn attention to the novel developments in the practice of anatomical pathology and the evolving role of the anatomical pathologist in healthcare provision. In the subsequent section, I bring to light some of the likely reasons for the under-representation of the practice of anatomical pathology in current ethics literature. A possible explanation for the inadequate representation of the practice of anatomical pathology in the ethics literature could be found in the very nature of anatomical pathology practice. As I mentioned earlier in this chapter, the practice of anatomical pathology represents the basis for the treatment of those diseases which require a diagnosis based on tissue removed from the patient. If the pathological diagnosis is incorrect, the treatment which follows will be inappropriate (either in the form of over-treatment and under-treatment) and often harmful to the patient.

Barron suggests that all healthcare professions can be categorised under one of the following:

- Personal medicine. Here the key encounter is directly between one doctor and a single index patient whom the doctor is seeing at that time. The doctor may be a general practitioner (GP) or specialist clinician (Baron, 1993: 385).

- Population medicine. Here, the doctor does not usually have direct or indirect contact with individual patients but has responsibilities towards a whole group of patients or potential patients in the community (Baron, 1993: 385).
- Pathology. (In this case, the pathologist has a responsibility towards individual patients and, at times, groups of patients but usually has no direct contact with either) (Baron, 1993: 385).

This distinction is worth noting, as it shows that the relationships which characterise the practice of anatomical pathology differ from the relationships that characterise personal medicine; for which the principle-based approach was developed. As such, it is expected that certain aspects of the principle-based approach will not apply to this indirect form of patient care. This lack of patient contact is a consequence of the specialised equipment that is required and the large number of biopsies which anatomical pathologists routinely diagnose, which has removed anatomical pathologists from the clinical environment as a pathology laboratory will generally service many different healthcare clinics and hospitals. This implies that the anatomical pathologist functions under the clinical horizon. The paths of the 'faceless' anatomical pathologists and their 'faceless' patients rarely cross and explains the poor visibility of anatomical pathology practice. Patients might not even be cognisant of the fact that the diagnosis is established by the interpretive process of a specialist doctor, a process that is dependent on inter-observer and intra-observer variations, and not by a machine in the laboratory (Stempsey, 1989). It is thus not surprising that this setting has resulted in the role of pathology, in general, being undervalued and often misinterpreted by patients, by colleagues and by society, at large (Stempsey, 1989). However, as noted earlier in this chapter, it is of great importance to have detailed knowledge regarding the clinical history of the individual who suffers from a disease, and this is also applicable to the practice of anatomical pathology.

Modern anatomical pathology practice has become an integral component in many of the phases of healthcare provision, from prevention, to diagnosis, to monitoring treatment outcomes to prognosis. Modern medicine is rapidly evolving as novel scientific discoveries are made in various fields of medicine and impact on the practice of anatomical pathology as Parslow Adsay, Krasinskas and Roback (2017: 325) point out:

> The only constant in pathology is change. New diseases are discovered; new pathogens emerge; diagnostic criteria, expert opinions, and favourite systems of terminology remain forever in flux. Arcane concepts, techniques, and instruments that were once

> confined to the research laboratory continually find their way into our daily clinical practice.

As a result, pathologists need to constantly keep abreast of these new developments and incorporate them in their routine pathological practice (Parslow *et al.*, 2017). Similarly, medical ethics should keep abreast of these novel discoveries and evolve accordingly (Ben-Moshe, 2019). But it seems that ethics in pathology practice is not evolving at the same pace as technical advances in the field.

> It is surprising that so little has been written about ethics in the practice of pathology. Technology seems to expand more rapidly than our ability to ethically reflect on it. This limitation is at the heart of many ethical dilemmas. Pathology, with much emphasis on use of medical technologies, would seem to be a field ripe for ethical reflection (Stempsey, 1989: 731).

Such ethical reflections are important in positioning the practice of anatomical pathology in such a way so as to explore the unique ethical responsibilities of the anatomical pathologist. Furthermore, ethical reflections are important in clarifying any overlap in ethical responsibility between the clinician and the anatomical pathologist, respectively, while being relevant to the current scope of the practice and the internal goods of the practice and ultimately, to the goals of the practice.

2.4 Conclusion

This chapter provided the initial groundwork for understanding the various tasks involved in the pathological diagnostic process with a specific focus on the human tasks and the unique relationships that develop between the anatomical pathologist and the treating clinician. This was a significant starting point in understanding the nuances and various stages of the pathological diagnostic process, the complexities of which are superficially discussed in current ethics literature.

To this end, I have shown that apart from the technical laboratory tasks which take centre stage in current ethical debates, the human aspects of the practice and unusual relationships are equally significant in ensuring a beneficial diagnosis for the patient. I highlighted that the various human tasks involved in reaching a final diagnosis in the practice of anatomical pathology are complex (Pena and Andrade-Filho, 2009). The integration of the various domains such as the cognitive domain, a communicative domain, a normative domain, and a

medical conduct domain, culminates in the establishment of a final diagnosis, based on the highest probability and the selection of an appropriate management strategy (Pena and Andrade-Filho, 2009).

I have drawn attention to the influence of recent technological developments and the unusual relationships in anatomical pathology on the accuracy and relevance of the pathological diagnosis for the further management of the patient. I also emphasised the need to explore the current role that anatomical pathologists play within the healthcare team which is superficially described in current ethics literature. Lastly, I have drawn attention to the need for ethical updates, given the unique features of this medical specialty by focusing more attention on the relationships between the various stakeholders involved.

Having explored the distinctive features of anatomical pathology practice and situated the role of anatomical pathology practice in the chain of healthcare provision, in the next chapter, I draw attention to the gaps in the application of the principle-based ethics in addressing the human aspects of the practice, the value of practice-specific roles, the relationships unique to the practice and the unusual position of the practice in the healthcare team.

CHAPTER 3: WHY THE PRINCIPLE-BASED APPROACH IS INSUFFICIENT

3.1 Introduction

Thus far, in chapter two, I have explored the distinct human facets that characterise modern anatomical pathology practice which are not readily apparent in current ethics literature. I have shown that the practice of anatomical pathology differs in several aspects from the clinical healthcare disciplines, particularly in respect to the unusual collaborations which are characteristic of the practice and its unconventional position in healthcare provision. These aspects are neglected in current ethics literature. I have also shown that little work examines the current role and ethical responsibilities of the modern anatomical pathologist in the healthcare team, brought about by novel technological advancements in the era of personalised patient care.

In this chapter, I show that this neglect can be attributed to the gaps in the principle-based approach in catering for the unique relationships and human aspects of anatomical pathology practice. By human aspects, I refer to the pathological diagnostic process which is a human endeavour achieved through various human tasks. These human tasks as previously shown in chapter two, are complex and require the integrations of a cognitive domain, a communicative domain, a normative domain, and a medical conduct domain in the context of the anatomical pathologist- clinician relationship (Pena and Andrade-Filho, 2009).

I evaluate whether the principle-based approach (which is prevalent in most, if not all spheres of healthcare ethics, including ethics literature pertaining to pathology practice) can serve as a complete moral guide to solving ethical dilemmas specifically encountered in the practice, and claim that it cannot.

At its core, the principle-based approach has the four principles of respect for autonomy (honoring an individual's right to make choices), beneficence (advancing benefits and minimizing harms), non-maleficence (mitigating harms), and justice (promoting the fair distribution of benefits and harms) (Beauchamp and Childress, 2013). These principles are intended to serve as an instrument of moral justification and guidance in solving ethical dilemmas which begins with a process of specification, followed by a process of balancing (Beauchamp and Childress, 2013). Specification requires an interpretation of what each principle requires in the specific case; balancing refers to the process of deciding which of the competing principles, previously specified, should be given greater attention (Shea, 2020).

These two core processes culminate in the selection of the appropriate principle on a case-by-case basis, which consequently determines the action plan that the healthcare practitioner is expected to follow (Shea, 2020). I show that by honouring its universal and pluralistic nature, the principles are insufficient, on their own, to provide action guidance in the context of healthcare provision, and specifically in the context of modern anatomical pathology practice. Furthermore, in the context of healthcare practice, principles require the identification of the specific ends of different subfields of medicine coupled with the role-specific responsibilities and virtues necessary for healthcare practitioners to acquire.

More specifically, in the context of modern anatomical pathology, I claim that the reliance on principles alone in the process of ethical decision making, undervalues the various human aspects and relationships unique to the practice and obscures the current goals of modern anatomical pathology. This creates potential for conflict between the ethical responsibilities of the pathologist and those of the treating clinician respectively, for which the principles, on their own, cannot provide sufficient guidance on how these conflicts should be resolved. To this end, I claim that the principles should be supplemented with a set of virtues and an account of the immediate ends of anatomical pathology practice which allows for the identification of the role-specific responsibilities of anatomical pathologists.

Given the insufficiencies of the principle-based approach, it comes as a surprise that it is still the most dominant approach used to evaluate ethical issues that arise the context of modern anatomical pathology practice.

My overarching aim in this chapter is to critically analyse the suitability of the principle-based approach in resolving ethical conflicts that arise in clinical healthcare provision in general, and specifically, in modern anatomical pathology practice. This is key to understanding the predominant assessment method used in addressing ethical issues in modern anatomical pathology practice in current literature and is relevant to the virtue ethics framework that I aim to develop in this thesis. To achieve this aim, I organise this chapter as follows. I begin section 3.2 of this chapter with an exploration of the characteristic features of Beauchamp and Childress's four principles in their general application to clinical healthcare provision. Then in section 3.3, I show that given their pluralistic and universal nature, the principles highlight:

- The need of an account of the ends of various disciplines of healthcare practice.
- The need for supplementation with a set of virtues.

My conclusion is that this approach cannot claim to serve as a complete moral guide to solving ethical issues encountered in healthcare provision. Later, in section 3.4, moving from clinical healthcare practice to discipline-specific anatomical pathology practice, I show that the types of ethical issues and conflicts that arise in the practice of anatomical pathology, differ from those that arise in clinical practice and argue that the principles, on their own, do not provide sufficient guidance on how these conflicts should be resolved. I argue that this approach does little to recognise the value of role-specific responsibilities and role-virtues associated with anatomical pathology practice, undervalues the various human aspects of the practice, and obscures the current goals of modern anatomical pathology. I conclude, in section 3.5 that, for the principles to provide adequate ethical guidance in clinical healthcare provision and specifically in the practice of anatomical pathology, they require supplementation with a set of professional virtues and an account of the specific ends of the various branches of healthcare practice.

Before I undertake to pinpoint the gaps of the principle-based approach, I first discuss some of its pertinent features which are important in the issues discussed in this chapter.

3.2 An account of the principle-based approach

I begin this section by exploring the principle-based approach, originally advanced by Tom Beauchamp and James Childress in 1979 in their book titled *Principles of Biomedical Ethics*[21] which is arguably the most widely used and eminent analytical framework or approach in bioethics. The principle-based approach relies on the four principles of respect for autonomy, beneficence, non-maleficence, and justice which express a group of potential obligations that healthcare practitioners are required to take into consideration when confronted with an ethical dilemma. These principles are intended to provide a user-friendly procedure of moral justification and guidance in ethical dilemmas which begins with a process of specification, followed by a process of balancing (Beauchamp and Childress, 2013). These two core processes culminate in the selection of the most relevant principle, on a case-by-case basis which guides the course of action that the healthcare practitioner is expected to follow (Shea, 2020).

[21] Since the first edition of their book titled *Principles in Biomedical Ethics* was published in 1979, seven other editions of the book have been published in 1983, 1989, 1994, 2001, 2003, 2009 and 2013.

In brief, the principle of respect for autonomy implies that by honouring the autonomous choices of individuals, one acknowledges that they have a right to hold their own views, express their own opinions and make choices based on their personal values and perspectives (Beauchamp and Childress, 2013). The principle of beneficence can be defined as those "actions or rules aimed at benefiting others" (Beauchamp, 2019: 2). The principle of beneficence extends to include "acts of charity, mercy, and kindness and obligations to help others, such as those prescribing the provision of benefits, protection of interests, and promotion of welfare" (Beauchamp and Childress, 2013:151). Contrasting the principle of beneficence is the principle of non-maleficence also known as the principle of *primum non nocere* which translates to 'first do no harm' (Beauchamp and Childress, 2013). The principle of non-maleficence highlights the imperative duty of healthcare practitioners to abstain from intentionally causing harm to their patients, a concept that has a "long-established tradition in the medical profession" (Meara, Schmidt and Day, 1996: 17). In respect to the principles of beneficence and non-maleficence, it is important to comment briefly on the concept of harm, as understood by Beauchamp and Childress in their approach. In order to remain neutral towards competing doctrines of human well-being, Beauchamp and Childress understand and consider the concept of harm in the non-normative sense, that is in the absence of notions of wrongdoing (Shea, 2020). As Shea explains, being rooted in principles means that:

> Deontic properties like rightness and wrongness are independent of axiological properties like goodness and badness; right-making and wrong-making features are not grounded in good-making and bad-making features (Shea, 2020: 443).

For Beauchamp and Childress then, harm is plainly "a thwarting, defeating, or setting back of some party's interest; thought of as being against the person's interests" (Beauchamp and Childress, 2013: 153). While the authors agree that harm is a disputed notion, they nonetheless consider that consensus can be reached that serious bodily and psychological injury characterises harm in the context of healthcare (Beauchamp: 2013). Finally, the principle of justice, is intended as a guide to ensure the fair allocation of benefits, risks, and costs in all aspects of healthcare provision (Beauchamp and Childress, 2013).

Beauchamp and Childress draw a distinction between these four principles and rules, obligations, rights, and virtues; in their view, the principles serve as the basis for understanding and guiding healthcare practitioners in solving ethical dilemmas (Beauchamp and Childress,

2013; Garcia, 2020). This approach (otherwise known as principlism)[22] is intended to provide healthcare practitioners with an accessible happy medium between the more traditional ethical theories and general notions of morality, in analysing ethical issues concerning healthcare provision (Beauchamp and Childress, 2013; Meara, Schmidt and Day, 1996). As mentioned earlier in this chapter, this approach has become so influential that it is considered the benchmark for analysing ethical issues which arise in the healthcare setting. The principle-based ethics is characterised as a type of moral justification and a:

> Method of reflection on moral issues with the goals of (a) solving a particular dilemma or set of dilemmas and (b) establishing a framework to guide future ethical thinking and behaviour (Meara, Schmidt and Day, 1996: 12).

In the first edition of their book titled *Principles of Biomedical Ethics,* Beauchamp and Childress advance this principle-based approach which contains certain elements from various moral theories, and which is intended to "offer a systematic analysis of the moral principles that should apply to biomedicine" (Beauchamp and Childress, 1979: vii). The authors expand the three principles specified in the Belmont Report[23] into a framework consisting of the four principles. The main aim of the principle-based approach is to "sort out work already done and bring some order and coherence to the discussion" (Beauchamp and Childress, 1979: vii). Furthermore, the approach that the authors advance represents a "microcosm of bioethics as a whole" considering that the authors themselves hold opposing ethical views[24] (Waltho, 2010: 191). The authors believe that the principles which they advance are sufficient to guide ethical reasoning in healthcare as the principles are intuitively rooted in "common morality" (Beauchamp and Childress, 2013: 3). By common morality, Beauchamp and Childress point to a variety of widely acknowledged and undisputed moral duties that most individuals already agree with and practice on a day-to-day basis (Beauchamp and Childress, 2013). In other words, they consider that all individuals who submit to a moral life would naturally refrain from acts of theft, deception, and murder, to name but a few (Beauchamp and Childress, 2013).

[22] A term with a negative overtone utilised by Clouser and Gert in 1990 in their criticism levelled against the principle-based approach to bioethics introduced by Beauchamp and Childress (Clouser and Gert, 1990).
[23] The three principles, namely *Respect for Persons*, *Beneficence* and *Justice*, expressed in the Belmont report are intended to serve as guidelines for research that involves human participants.
[24] Tom Beauchamp holds a consequentialist view while James Childress holds a deontological view (Waltho, 2010).

It is from this common morality that the four principles emerge (Beauchamp and Childress, 2013).

For Beauchamp and Childress, the four principles offer justification and concrete guidance in ethical decision-making by means of two essential processes of specification and balancing. More specifically, the process of specification is defined by Beauchamp and Childress as "a process of reducing the indeterminacy of abstract norms and generating rules with action-guiding content" (Beauchamp and Childress, 2013:17). Otherwise stated, the process of specification represents the point of departure for contextualising the principles and involves an evaluation of the possible harms and benefits involved in each case (Shea, 2020). The other process of balancing or weighting, refers to the evaluation of "the relative weights and strengths of different moral norms", thereby determining which of the specified principle holds greater precedence in each situation (Beauchamp and Childress, 2013: 20; Shea, 2020). All four principles must be taken into consideration in every ethical problem as the principles are not absolute; that is to say each principle is considered to have "*prima facie*[25] stringency" and can be outweighed by any other principle (Shea, 2020: 443). In other words, while the processes of specification and balancing might favour one specific principle over another, none of the four principles should be given automatic priority. In this way, the principles are considered as middle levels of reasoning and are "quasi theoretical and quasi practical in that they provide bridges between the theory and practice, and thus, the means of moving back and forth between the concrete and the abstract" (Meara, Schmidt and Day, 1996: 11). From a principle-based perspective, the healthcare practitioner is first required to specify which principles are in conflict and based on the specifics of the case, decide which principles hold greater priority. The chosen principle then translates into specific obligations for the healthcare practitioner to pursue.

Apart from specification and balancing, Beauchamp and Childress also advocate for a process of "reflective equilibrium"[26] as a way of determining which of the principles should receive priority. The popularity of the principle-based approach can be understood as stemming from its:

[25] The concept of *prima facie* principle is inspired by the notion of *prima facie* duty first introduced by Ross, which applies to a duty that is considered obligatory is a specific context (Ross, 1973).
[26] A concept used by Rawls in the theory of justice (Rawls, 2005).

> Ecumenical and pluralistic nature; it operates with a set of moral norms that are affirmed by people from a wide variety of moral traditions, and it combines many of the most plausible elements of different ethical theories into a clear and commonsensical framework (Shea, 2020: 442).

In this way, the principle-based approach represents an accessible tool for everyone to understand and apply, including novices (Gillon, 2015). Gillon summarises the merits of the approach in ethical assessment in healthcare which is explained by a:

> Universalisable set of *prima facie* moral commitments to which all doctors can subscribe, whatever their culture, religion (or lack of religion), philosophy or life stance; in addition it provides a basic moral language and a basic moral analytic framework that all interested in biomedical ethics can share (2015: 115).

Interestingly, as I show in the subsequent section, the very features that make the principles so popular and user-friendly point to further requirements, namely an account of the ends of various disciplines of healthcare practice as well as the virtues that healthcare practitioners should develop.

3.3 Why principle-based ethics is insufficient

In this section, I argue that the principle-based approach, on its own, is insufficient to provide adequate guidance for ethical decision-making in healthcare provision. My argument is structured as follows. I show that as a means of honouring their intended pluralistic and universal structure (which sets them apart from other more traditional moral theories), the principles highlight the need for an account of the legitimate ends of the various branches of healthcare, together with the role-specific responsibilities of healthcare practitioners. Furthermore, the principle-based approach highlights the importance of the incorporation of character in the ethical decision-making process. This is because the development of a virtuous character and an appreciation of the specific goods that healthcare practice aims to achieve, are integral to the processes of justification and balancing (which Beauchamp and Childress themselves knowingly or unknowingly appeal to in their own case-based discussions) in various clinical contexts (Shea, 2020). My conclusion is that the principles require supplementation with a set of virtues and an evaluation of the goals of the various branches of healthcare practice.

In the subsection to follow, I clarify why the principles being grounded in universal views of morality, require an account of the specific ends of the various branches of healthcare practice. I then show later in the subsection 3.3.2 that the principles draw our attention to the need for supplementation with a set of virtues.

3.3.1 Principles highlight the need for an account of the ends of healthcare practice

As mentioned previously in the chapter, the role of the principles is to offer normative reasoning and provide concrete guidance through a generalisable guide to resolving ethical issues encountered in healthcare provision (Shea, 2020). Specification and balancing which are at the heart of the principles are based on notions of common morality or common sense, rather than on any specific moral theory (Shea, 2020). Furthermore, the process of specification requires "adding more context and descriptive content to flesh out a principle" (Shea, 2020: 444). As Beauchamp and Childress suggest, it is through the process of specification that the scope of the principles are determined by "spelling out where, when, why, how, by what means, to whom, or by whom the action is to be done or avoided" (Beauchamp and Childress, 2013: 17). The second process of balancing, involves an estimation and judgement about the "relative weights and strengths of different moral norms" (Beauchamp and Childress, 2013: 20). Balancing requires a process of establishing the "comparative weights, priority, strength, or stringency of moral principles" in those instances in which the principles are at odds, in order to determine which of the principles becomes an overriding obligation in a specific scenario (Shea, 2020: 445). While the processes of specification and balancing may be straightforward in some ethical dilemmas, as the context of the ethical dilemmas become more intricate, the healthcare practitioner is compelled to move away from simply following a set of rules and appeal to other more specific moral theories (Meara, Schmidt and Day, 1996). Meara, Schmidt and Day (1996:13) provide a valuable explanation of the scope of ethical justification of the principled-based approach by stating that:

> In its simplest form, ethical justification provides a rationale for preferring one moral decision or action over another. The model of ethical justification begins at its lowest level with common sense and the facts of everyday situations, extends to intuition, and finally, to a tripartite critical-evaluation level consisting in ascending order of abstraction from rules to principles to theory.

By way of illustrating the need for an account of the ends of healthcare practice, we can consider the following simple case scenario. A healthcare practitioner establishes an

unfavourable diagnosis of an inoperable, slow growing malignancy for an elderly, depressed patient who is about to take a short trip to visit his children. The healthcare practitioner needs to ascertain whether to reveal the bad news to the patient immediately or wait for the patient to return from the short trip. In this example, the healthcare practitioner must first specify which principles are in conflict, on the basis of some evaluation of personal goods and on a determination of the relevant benefits and harms associated with each option. If we recall, according to Beauchamp and Childress, the principle of beneficence specifies an obligation to "help others such as those prescribing the provision of benefits, protection of interests, and promotion of welfare" (Beauchamp and Childress, 2013: 151). Furthermore, they conceive the principle of non-maleficence as an obligation "not to inflict evil or harm" (Beauchamp and Childress, 2013: 151). When specifying, for example, that the principles of beneficence and non-maleficence are in conflict in this case scenario, some prior account of goods and harms is demanded, in the context of the ends that healthcare practice aims to achieve.

The conflict of the principles in this case scenario can be evaluated as follows. The principle of beneficence requires that the healthcare practitioner inform the patient about the diagnosis promptly, so that treatment will have the best chance of success. The principle of non-maleficence requires that the practitioner not harm the patient by informing him promptly, thereby spoiling his holiday and possibly aggravating his depression. The very same action that will benefit the patient will also harm the patient and the healthcare practitioner must weight which principle should take priority. Additionally, the principle of patient autonomy also requires specification in this case-scenario. This principle requires that the healthcare practitioner reveal the diagnosis to the patient without delay and accept that the patient might include (as part of the process of specification), other types of goods. In this way, the healthcare practitioner allows the patient to decide whether to cancel the trip or postpone the commencement of the treatment.

This simple case scenario raises several interesting questions regarding the assessment of associated benefits and harms that should be taken into account as part of the process of specification of the principles, in the context of the ends that healthcare practice aims to achieve. These questions can be summarised as follow. Should healthcare practitioners include possible psychological harms and benefits in their decision-making (in this case, that a trip with the family might benefit a depressed patient)? Should healthcare practitioners consider other (non-medical) harms and benefits (in this case, that revealing the bad news immediately will spoil the patient's holiday and possibly aggravate the patient's depression)? And lastly should

healthcare practitioners always focus on and prioritise medical goods over other kinds of goods?

These questions highlight that, in the process of specification of the principles, there is a need to first ascertain what constitutes good and what constitutes harm in the context of what healthcare practice aims to achieve. The specification of goods and harms as a prerequisite for balancing the principles of beneficence and the related principle of non-maleficence is also highlighted by Gómez-Lobo and Keown (2015: xx), who explain that:

> Since nonmaleficence enjoins us not to harm people and beneficence exhorts us to benefit others, any application of these principles logically requires a prior conception of "the good" that can provide criteria to determine what is "harmful" and what is "beneficial". If a person does not have a firm grasp of the human good(s), how can she argue with any assurance that her contemplated action will harm or benefit someone on the receiving end of her action?

The principles, it seems, require a method of narrowing their scope by "spelling out where, when, why, how, by what means, to whom, or by whom the action is to be done or avoided" (Beauchamp and Childress, 2013: 17). But how would such a decision be made in the absence of a prior understanding and evaluation of the goods and harms at stake as demanded by the legitimate ends of healthcare? For Beauchamp and Childress, such a decision is simply made through the process of specification which clarifies the content and balancing based on considerations of setbacks to patient's interests (Beauchamp and Childress, 2013). A limitation of the principle-based approach is that it does not provide an account of the ends of healthcare practice to be utilized in the process of specification and balancing. Although this purposeful omission is necessary in order to honour the "moral and religious pluralism by remaining neutral between competing doctrines of the human good", it poses a challenge to specifying the principles (Shea, 2020: 446). This is because to adequately specify the principles (particularly those of beneficence and non-maleficence) we require a prior understanding and appraisal of what counts as goods and what counts as harms in the unique contexts (Shea, 2020). These unique contexts, in healthcare provision, are guided by the ends that healthcare practice aims to achieve (Spielthenner, 2017).

The process of balancing poses similar challenges for the principle-based approach since the selection of one principle over another is based on to the perceived benefits and risks involved (Shea, 2020). This challenge is acknowledged by Beauchamp and Childress who concede that

there may be instances in which it is not possible to ascertain which principle carries more weight (Beauchamp and Childress, 2013).

Interestingly, Shea demonstrates that Beauchamp and Childress themselves rely on "substantive and contestable assumption about goods and evils, thereby confirming that axiological considerations are doing essential normative work in balancing judgements" (Shea, 2020: 455). As a case in point, Shea evaluates Beauchamp and Childress's axiological[27] justification in the following example:

> Obligations not to harm others are sometimes more stringent than obligations to help them, but the reverse is also true. If in a particular case a healthcare provider inflicts a very minor injury—swelling from a needlestick, say—but simultaneously provides a major benefit such as a lifesaving intervention, then we need to consider the obligation of beneficence to take priority over the obligation of nonmaleficence (Beauchamp and Childress, 2013: 151).

Shea goes on to explain that in the above justification, Beauchamp and Childress in fact, make use of what he calls "an explicit appeal to benefit versus harm to determine which principle is weightier" (Shea, 2020: 456). This is owing to the fact that "spelling out why, when, how, and for whom certain actions are beneficial or harmful is one of the main functions of a value theory" (Shea, 2020: 447).

A counter argument could be made that although the principle-based approach does indeed make assumptions based on notions of benefits and harms, these assumptions can nevertheless be made as part of a common morality (Shea, 2020). More specifically, certain goods and harms are generally accepted as part of common morality which are intuitive and reasonably uncontroversial (Shea, 2020). However, there is significant disagreement regarding what constitutes benefit and what constitutes harm in matters affecting the various aspects of healthcare (Shea, 2020). In fact, several aspects continue to be disputed, such as the different views on what constitutes quality of life and death, autonomous decisions, and concepts pertaining to the relative importance and ranking of benefits and harms associated with healthcare provision (Shea, 2020). What is more, according to the principle-based view, since

[27] In philosophy, axiology refers to the study of concepts of value. "Axiological justification relies on axiological properties such as goodness and badness as well as good-making and bad-making features found in theories of human good or well-being" (Shea, 2020: 445). "There are several theories of well-being including hedonism (founded in aspects of pleasure and enjoyment), desire theory (founded on aspects of desires and preferences) and eudaimonism (founded in aspects on a virtuous life)" (Shea, 2020: 445).

all aspects of healthcare provision can be reduced to common morality, then healthcare practitioners are held to the same moral standards as anyone else in society (Rhodes, 2019). In other words, the expected behaviours and responsibilities for healthcare professionals and everyone else in society are expected to be indistinguishable (Rhodes, 2019). Evidently, the responsibilities of healthcare practitioners differ from the responsibilities of the general society, given the unique aspects and special relationships which are at the core of healthcare provision (Rhodes, 2019). Consider, for example, an individual asking probing and embarrassing questions in a general social setting regarding someone else's private life (Rhodes, 2019). Such conduct would be deemed inadmissible in common morality while being regarded as admissible and in fact, advisable, in the context of healthcare provision, given the special relationships that are born out of the nature of the profession (Rhodes, 2019). A further example is the expectation of caring and concern which is considered as the central pillar in healthcare provision which supersedes the caring demanded by common morality (Rhodes, 2019). It follows that healthcare practice deals with a set of circumstances that are unique to the specific roles that healthcare practitioners play within the context in which they serve society.

The question then arises since common morality cannot help us justify the unique responsibilities expected from healthcare practitioners to what other source can one appeal for such justification? A viable answer to this question lies in a morality that is internal to the healthcare profession, such as that advanced by Edmund Pellegrino. Professional healthcare practice entails a commitment to a set of unique responsibilities that find justification from the internal moral aspects of the healthcare practice viewed as a human endeavour with a specific *telos* (Pellegrino, 2002). Professional roles are integral in this human endeavour and are guided by the obligations derived from the Hippocratic oath accepted by all those entering into the profession (Garcia, 2020). This oath represents more than a promise, as unlike a promise, it "allows no room for any party to release the oath-taker from her obligation" (Garcia, 2020: 484). In view of the importance of characterising the unique responsibilities associated with healthcare provision, Swick suggests several essential elements or distinct sets of behaviours which frame considerations of the responsibilities associated with professionalism in healthcare practice (Swick, 2000). Some of these expected behaviours are, amongst others, that "physicians evince core humanistic values, including honesty and integrity, caring and compassion, altruism and empathy, respect for others, and trustworthiness" (Swick, 2000: 615).

It may be argued that core humanistic values, such as integrity, altruism and compassion represent ideals which are not in fact required in professional practice since even a professional

who does not exercise these humanistic values can nonetheless, exemplify professional acts (Swick, 2000). However, as Swick (2000: 614) explains, humanistic values "are so central to the nature of the physician's work, no matter what form that work takes, that no physician can truly be effective without holding deeply such values".

Furthermore, it seems implausible that a healthcare practitioner who is, for instance, not caring and compassionate towards her patients and the patient's family and does not practice with integrity and discernment (otherwise known as practical wisdom) could in fact, ensure the good of their patients and the community (Swick, 2000). This view is similarly expressed by Pellegrino who considers that "without the oath the doctor is a skilled technician or laborer whose knowledge fits him for an occupation but not for a profession" (Pellegrino, 2002: 379).

To sum up, given the special nature of healthcare practice, the values and role-dependent responsibilities that are linked to the goals of the practice, common morality cannot be relied upon as the only source of justification for the role-specific responsibilities of its professionals.

Beauchamp and Childress acknowledge some of the difficulties posed by their approach in resolving ethical conflicts and offer a two-phased remedy to resolving conflicts (Beauchamp and Childress, 2013). The first phase comprises a list of conditions that are intended to "help reduce intuition, partiality, and arbitrariness" in balancing competing principles and the other is an appeal to the character of the healthcare practitioner (Beauchamp and Childress, 2013: 22). According to Beauchamp and Childress (2013: 23), the following conditions, presented in bulleted form below, must be fulfilled before a principle can be disregarded:

- Good reasons can be offered to act on the overriding norm rather than on the infringed norm.
- The moral objective justifying the infringement has a realistic prospect of achievement
- No morally preferable alternative actions are available.
- The lowest level of infringement, commensurate with achieving the primary goal of action, has been selected.
- All negative effects of the infringement have been minimised.
- All affected parties have been treated impartially.

Thus, the four principles do not provide adequate action guidance as they stand and require an account of the legitimate ends of healthcare practice. It is from these specific ends that healthcare practitioners can determine what constitutes benefit and harm. Similarly, it is from

these ends of healthcare practice that the role-specific responsibilities of healthcare practitioners can be determined.

In the remainder of this section, I show that the principles require supplementation with a set of virtues.

3.3.2. Principles draw attention to the need for supplementation with virtues

The original approach that Beauchamp and Childress propose in the first edition of their book is heavily influenced by deontological[28] and utilitarian[29] ethical theories, to the neglect[30] of virtue ethics. In the later editions of their book, Beauchamp and Childress rectify this by suggesting that other ethical theories and perspectives can enrich the principle-based approach (Beauchamp and Childress, 2013). Importantly, the authors specify several virtues as being essential in healthcare practice. These include the virtue of compassion, discernment, trustworthiness and integrity (Beauchamp and Childress, 2013). From the arguments proposed by the authors, it seems that they view the principles as fundamental and virtues are supplementary and derived from the principles (Beauchamp and Childress, 2013). The authors also remark the following in the preface to the seventh edition of their book titled *Principles in Biomedical Ethics:*

> We have had a major commitment to virtue theory and moral character since our first edition and over the years we have expanded our discussion of these topics (Beauchamp and Childress, 2013).

The second phase of the remedy that Beauchamp and Childress put forward for the balancing problem, is an appeal to character traits or virtues of the healthcare practitioner. They consider that healthcare practitioners must exhibit specific virtues that will assist them in making justified decisions regarding which principle takes priority in specific contexts. In healthcare practice, virtues can be defined as "acquired habits, skills, or dispositions that make people effective in social or professional settings" (Ortmann et al., 2016: 15). Virtues in healthcare

[28] Deontological ethics has, as its central focus, a set of duties that serve as justification for morally right and wrong action. From a duty-based viewpoint, the right action is chosen for its own sake, regardless of the consequences and these duties are to be served in all circumstances (Hursthouse and Pettigrove, 2018).
[29] Utilitarianism judges an action to be right or wrong based on the consequences of the actions (Hursthouse and Pettigrove, 2018).
[30] This neglect is explained by the fact that the renaissance of virtue, the third dominant ethical theory in bioethics, only gained popularity in the 1980s after the first edition of their book was published.

practice can be helpful in "assessing skills and capacities needed for success in a community, organization, or profession" (Ortmann et al., 2016: 15).

This call for virtues shows that Beauchamp and Childress recognise that no approach will be able to explain how to choose between competing interests in all scenarios encountered in healthcare. They write:

> How physicians and nurses balance different moral considerations often involve sympathetic insight, human responsiveness, and the practical wisdom of discerning a particular patient's circumstances and needs…We are proposing a model of moral judgement that focuses on how balancing and judgement occur through practical astuteness, discriminating intelligence, and sympathetic responsiveness that are not reducible to the specification of norms. Capacities in the form of virtues of compassion, attentiveness, discernment, caring, and kindness are integral to the way wise moral agents balance diverse, sometime competing, moral consideration (Beauchamp and Childress, 2013: 21-2).

This appeal to character is significant since the possession and exercise of certain virtues by healthcare practitioners assists in evaluating the priority of competing principles (Shea, 2020). Beauchamp and Childress consider that from the various virtues, discernment, or practical wisdom[31] is a fundamental intellectual virtue which can assist healthcare practitioners in balancing between competing principles (Beauchamp and Childress, 2013). Practical wisdom adds an essential component in identifying and ordering the relevant benefits and harms, thereby aiding the process of specification and balancing (Shea, 2020). This identification and ordering can generally include:

> The various courses of action available, the foreseeable consequences of one's actions, facts about the character and expected behaviours of the person(s) involved, special roles and relationships that affect one's obligations, and the various goods and evils at play (Shea, 2020: 450).

In the healthcare context these particular circumstances would extend to aspects, such as "medical indications, prognosis and treatment options, the patient's wishes and values, the patient's decision-making capacity, family and friends, cultural and religious factors, conflicts

[31] Practical wisdom is translated from the Greek word p*hronesis.*

of interest" (Shea, 2020: 450). By developing and applying the virtue of practical wisdom, healthcare practitioners are better equipped to justify which of the competing principles translates into an obligation. Practical wisdom then aids in establishing the goods and harms involved, identifying other virtues which might be appropriate to apply in the case and establishing the set of rules that direct behaviours (Van Niekerk and Nortjé, 2013).

Although practical wisdom is a helpful quality in balancing competing principles, there are a few problems with the way in which Beauchamp and Childress address this virtue. In Beauchamp and Childress's interpretation of virtues, the virtue of practical wisdom is misconstrued. As Shea eloquently explains:

> It seems that the principlist must say that a practically wise person will just be able to see which duty is the overriding one, and the explanation and justification stop here. On this picture, practical wisdom operates like a *deus ex machina*[32] whose nature and functions are mysterious; and it does not really answer the question of why certain principles trump others (Shea, 2020: 453).

Practical wisdom then cannot assist in specification and balancing as Beauchamp and Childress intend without a prior understanding of the benefits and harms involved (Shea, 2020). Apart from the virtue of practical wisdom, Beauchamp and Childress identify other virtues that are also important in the healthcare context. These virtues are compassion, discernment, trustworthiness, integrity, and conscientiousness (Beauchamp and Childress, 2013). Virtues can aid in recognising what constitutes goods and harms in a specific situation as well as "assessing the particulars of the situation to see which good(s) should be pursued and which means should be used" (Shea, 2020: 451). Alasdair MacIntyre also recognises that virtues are essential in the context of ethical decision making in healthcare. For him, virtues signify "those qualities that enable agents to identify both what goods are at stake in any particular situation and their relative importance in that situation and how that particular agent must act for the sake of the goods and the best" (MacIntyre, 2016: 190). In other words, from a virtue ethics perspective, the various virtues find a fundamental expression in value judgements of goodness and badness (Shea, 2020). The incorporation of virtues is also significant as a supplement to principle-based ethics given that the "selection, interpretation, ordering, an application of

[32] Shea make use of the Latin term *deus ex machina*, to refer to something that "appears or is introduced into a situation suddenly and unexpectedly and provides an artificial or contrived solution to an apparently insoluble difficulty" (Encyclopedia Britannica, 2021).

principles are largely based on an individual's character" which means that "both character and principles are essential concepts in the conversation of medical ethics" (Olivieri, 2018: 4). Importantly, Beauchamp and Childress recognise virtues as resulting from "expressions of caring" and acknowledge that there is a need to incorporate virtues in specifying and balancing between competing interests (Beauchamp and Childress, 2013: 37). They maintain, however, that an ethical approach in which virtues hold centre stage will downplay the relevant duties associated with healthcare provision, and claim that the principles are primary and that an account of virtue is derived from these principles (Beauchamp and Childress, 2013).

In summary, the principle-based approach which relies on universal and pluralistic *prima facie* principles are in themselves incomplete as they stand, as they are not able to provide adequate justification for favouring one principle over another. The core functions associated with the principle-based approach of specification and balancing as well as the incorporation of virtues as a guide to these processes requires an appeal to a more in-depth account of goods and harms than common morality can provide. To be meaningful in assessing ethical issues that arise during healthcare provision, the principles ought to be complemented by a set of virtues coupled with an account of the ends that healthcare aims to achieve. This is because choosing which principles are more important corresponds to the potential benefits and harms involved in the context of the specific ends of the various branches of healthcare practice. In the absence such an evaluation, ethical justification (which takes the form of prioritising one principle over the other) rests solely on common sense or even simpler, on individual intuition.

Thus far in this chapter, I have shown why the principle-based approach on its own is insufficient to provide adequate guidance for ethical decision-making in clinical healthcare. These insufficiencies are however, in my view, not sufficient to discard the principle-based approach entirely. The way I understand the principle-based approach (here I agree with Beauchamp and Childress) is as an accessible and helpful set of principles which serve as a point of departure for ethical deliberations, which paves the way for a more in-depth analysis of the role of character and role-specific responsibilities to serve as a complete picture of ethical deliberations. The development of such an account which focuses on character and the ends of various branches of healthcare practice represents one of the main aims of this thesis which I discuss in greater detail in subsequent chapters.

Given that the predominant assessment method used in addressing ethical issues that arise in modern anatomical pathology practice in based on the four principles, I focus for the remainder

of the chapter on the application and suitability of the principles in the practice of modern anatomical pathology. To this end, I claim that the principles are not particularly useful, on their own, to guide ethical decision-making in the context of anatomical pathology practice and similarly require supplementation with a set of virtues and the identifications of the ends specific to the practice of modern anatomical pathology.

3.4 Principles of biomedical ethics require supplementation in the practice of modern anatomical pathology

As I have already shown in chapter two, modern anatomical pathology practice is a multi-step human activity that relies on the integration of the various technical and human tasks for the establishment of a pathological diagnosis. Recall that the various human tasks involved in the diagnostic process are complex and range from analytical or cognitive skills, such as "perception, memory, verification and hypothesis creation", to the development of effective communication skills that ensure that adequate "arguments are provided in defence of the diagnostic conclusion" (Pena and Andrade-Filho, 2009: 125;127). Importantly, these various interpretive human tasks involved in the diagnostic process necessitates an interplay between the various tasks which significantly contribute to ensuring an accurate, beneficial, and timely diagnosis is achieved (Pena and Andrade-Filho, 2009). This multi-step diagnostic task is achieved from an unusual and constrained position for healthcare provision as anatomical pathologists rarely interact with the patients that they serve. This implies that the patient-anatomical pathologist relationship is by and large inexistent, and anatomical pathologists serve their patient through an auxiliary relationship which develops between the clinician and the anatomical pathologist.

Despite the distinctive features of the practice which takes place outside the usual clinical encounter, several authors have, over the years attempted to apply Beauchamp and Childress's four principles (which was developed to serve with the healthcare practitioner-patient relationship in mind) to address ethical issues encountered in general pathology practice (Baron, 1993; Serafimov, 2011; Rathnayaka, Beneragama and Hewavisenthi, 2016). The authors themselves recognise that the application of the principles is "clumsy because they are designed for face-to-face patient care" (Rathnayaka, Beneragama and Hewavisenthi, 2016; Serafimov, 2011: 1). Otherwise stated, the principles are not particularly helpful as they are designed with the patient-healthcare practice relationship in mind and the ethical dilemmas which emanate directly from this relationship. Apart from a few ethical aspects which relate

directly to the patient (such as issues of confidentiality with regards to information related to pathological diagnosis and pathological report and informed consent in participation in research which stem from the tissue submitted from diagnosis), most ethical aspects of the practice and ethical issues pertain to the interphase between the treating clinician and the anatomical pathologist (Pena and Andrade-Filho, 2009). This poses a challenge in the application of the principles outside of the particularities of the direct form of patient care for which they were developed.

In the section below, I illustrate these challenges in the application of the principles to two case-scenarios that represent possible ethical issues encountered in the routine practice of anatomical pathology.

3.4.1 Case-scenario 1

The anatomical pathologist receives a request that accompanies the biopsy of a retroperitoneal mass; the treating clinician requests, on the pathology report, a few additional laboratory investigations which she believes would identify the cause of her patient's infection. Following the microscopic evaluation and the integration of the various clinico-pathological parameters of the case as part of the cognitive domain, the anatomical pathologist concludes that the specific investigations requested by her clinical colleague are not indicated in this specific instance and that other investigations would be more beneficial in identifying the patient's infection and associated pathology. Following telephonic consultation, the clinician insists on the initial laboratory investigations that she requested and considers that since she is responsible for the management of the patient, her request is justified. While the pathologist considers that other investigations are more suitable in this case, she also wishes to maintain a good professional relationship with her clinical colleague which she knows is significant in benefiting the patient. The question arising from this scenario is whether the anatomical pathologist should concede to the demands of the clinician for the special investigations.

This scenario poses an unusual ethical dilemma that is indirectly related to the patient while directly related to the competing interests between the two stakeholders involved in the chain of healthcare provision for the patient. Unlike conflicts usually encountered in clinical practice, in the scenario presented above, the decision-making capacity of the clinician to determine what is beneficial for her patient (from her clinical evaluation of the patient) is in direct conflict with the decision-making capacity of the pathologist to structure her technical and cognitive interpretive tasks as she considers appropriate (in line with the clinico-pathological

interpretation) for the establishment of the pathological diagnosis. Although there is no direct contact with the patient, the anatomical pathologist nonetheless maintains a crucial relationship with the patient (through the patient-pathologist relationship), so it is important to maintain a good relationship with the clinician in the interest of benefiting the patient. Specification and balancing are more complex in view of the substitute relationship with the clinician that compensates for the lack of relationship with the patient. This is because "the final ethical and legal responsibility for the care of the index patient rests with the clinician" and, while the anatomical pathologist also has ethical and legal responsibilities towards the patient, this is achieved indirectly, via the relationship with the clinician (Baron, 1993).

From this case scenario, we can observe that the application of the principles on their own is not particularly useful in balancing between competing principles in cases in which the relationship is not as familiar as that between the patient and the clinician. In this case scenario, there is disagreement between the anatomical pathologist and the treating clinician. The duty to respect the clinician's autonomy conflicts with the anatomical pathologist's right to make an autonomous decision. Both the anatomical pathologist and the treating clinician claim to have authority about what is in the best interest for the patient, and neither want to defer to the other. Of note is that the four principles relate to the healthcare practitioner's treatment of their patients, not to the practitioner's treatment of each other. From a principle-based approach, there is a duty on the part of the anatomical pathologist as well as the clinician to benefit the patient. However, the principle-based approach does not provide any guidance pertaining to the resolution of ethical conflicts that arise between healthcare practitioners. Thus, the principle of patient autonomy does not apply in this case.

This represents a shortcoming in the application of the principle-based approach in the context of the indirect relationships which are characteristic of modern anatomical pathology practice. What this case scenario demonstrates, is that apart from a set of rules derived from the principles, anatomical pathologists require wisdom and experience to deal with potential conflicts with colleagues. Furthermore, they require the development and exercise of professional virtues that enable them to work effectively in a team and negotiate disagreements with other colleagues involved in the direct treatment of the patient. Hence, the demand to emphasize the importance of character and highlight the need to identify the specific roles that anatomical pathologist has in the chain of healthcare provision and the ends of the various branches of healthcare practice.

3.4.2 Case-scenario 2

A pathology laboratory receives a needle biopsy of a lesion in the neck of a sixty-year-old male from the surgeon. The lesion is briefly described on the pathology request form as 'fixed and firm in consistency'. Microscopic examination shows a tumour composed of clear cells, which grow in solid groups and cords. No signs of a lymph node or salivary gland tissue are present in the microscopic section. The demographic and clinical information provided on the pathology request form and the microscopic appearance of the initial section dictate the algorithm used by the anatomical pathologist to establish a list of likely diagnoses, which are arranged in order of probability. Clear cell tumours in elderly males may arise in tissues inherent to the site or spread to the site from distant location. In this case, the pathologist will most likely consider, as the differential diagnosis, a clear cell cancer originating in adjacent structures such as the parotid salivary gland or a metastatic deposit of a clear cell cancer with a primary growth at a distant site. The omission of a description of an ulcer in the head and neck region reduces the likelihood of a clear cell carcinoma of skin origin. The deep-seated location may however include a rare example of a clear cell type sarcoma, which is of connective tissue origin. For the anatomical pathologist to narrow down the various differential diagnoses, she requires specialised radiologic examinations to exclude salivary gland involvement and requests a panel of specialised laboratory techniques to facilitate the exclusion of cancers in the list of possible diagnoses, following which a final diagnosis of a metastatic renal cell carcinoma is made. Targeted treatment commenced following the diagnosis. At a later stage, the anatomical pathologist discovers that this patient had a kidney removed recently. If this information was disclosed prior to the microscopic examination, the special examinations would have been focussed on the probability of metastatic kidney cancer and several extra investigations not requested. The cost and the time frame of the final diagnosis would have been significantly decreased.

This rather detailed case scenario is significant in providing insight regarding the complex analytic algorithm followed during pathological diagnostic process and the constrained position of the anatomical pathologist who does not get to examine the patient.

This scenario similarly poses an unusual ethical dilemma not encountered in direct patient care. In this case, both the principle of non-maleficence and the principle of justice are significant. Barron explain that, based on the principle of non-maleficence, pathologists have the responsibility of avoiding harm by preventing inaccuracies and minimising errors in their diagnosis (Baron, 1993). Harm in the context of this scenario would mean a delay in the

treatment due to a delay in diagnosis or inaccuracies in the pathological diagnosis. In applying the principle of non-maleficence to this scenario, the following questions arise. Does the principle of non-maleficence extend to include the ethical responsibility of the anatomical pathologist in identifying a potential for harm due to lack of clinical information and discussing this potential harm with the clinician (Baron, 1993)? This question is difficult to answer in the absence of a more detailed evaluation of the characteristics of the relationships between the anatomical pathologist and the clinician. Such an evaluation requires the identification of the specific ethical responsibilities of anatomical pathologists towards the patients and towards the treating clinician respectively. It also requires the identification of the specific goals that anatomical pathology aims to achieve. Analysing this relationship in the context of the principle-based approach, it is not clear where the ethical responsibilities lie between the patient, the treating clinician, and the anatomical pathologist.

The principle of justice is also significant in this case in "setting priorities that prevent excessive and often unnecessary testing" (Wijeratne and Benatar, 2010: 97). However, as we can observe from the case scenario, the anatomical pathologist is dependent on the collaboration from the treating clinician (in the form of relevant information sharing) if she is to prevent such unwarranted testing. The discussion of preventing unwarranted testing should take place in the broader context of all those involved in the chain of healthcare provision whose actions are of consequence to the unwarranted testing. An evaluation of the role-specific responsibilities would also be required here for the adequate interpretation of the principle of justice that is context relevant.

From these two case-scenarios, we can observe that principle-based ethics on its own is insufficient to provide complete moral guidance to a medical specialty that routinely functions in the absence of a direct relationship with the patients that they serve. The difficulty in application, stems from the blurred lines of ethical responsibilities of the clinician and the anatomical pathologist, respectively. To this end, supplementation of the principles is required with a set of virtues that makes room for the incorporation of role-responsibilities as part of the ethical decision-making process. Clarifying these role-dependant relationships and the resultant role-virtues is important in positioning the practice of anatomical pathology in such a way as to clarify any overlap in ethical responsibility between the clinician and the anatomical pathologist respectively, while being relevant to the current scope of the practice and ultimately, to the goals of the practice.

In summary, the application of the four principles on its own in the context of modern anatomical pathology practice are not particularly helpful as it leaves several issues unexplored which are important in professional practice. Firstly, there is a gap in the identification of the role-specific responsibilities and goals distinctive of the practice of anatomical pathology, there is potential for conflict between the ethical responsibilities of the anatomical pathologist and the ethical responsibilities of the treating clinician respectively, towards their patients. Secondly, in the absence of an exploration of role-dependent responsibilities, the principles are not particularly useful in resolving conflicts encountered beyond the clinical encounter in unique placement of the practice within the chain of healthcare provision.

The way I understand the principles in the context of modern anatomical pathology practice, are as valuable starting points that alert anatomical pathologists towards the role-specific-duties that they have within the practice. If we recall from chapter two, the practice of modern anatomical pathology is guided by a set of well-established rules or guidelines in respect to technical norms (pertaining to the pathological diagnosis) as well ethical norms (pertaining to interaction with patients and colleagues) (Pena and Andrade-Filho, 2009). In respect to the ethical norms, the principles highlight, for instance that anatomical pathologists have a responsibility to benefit their patients by ensuring a timely and accurate diagnosis. Furthermore, anatomical pathologists have the responsibility to avoid harming the patient by minimising errors in the pathological diagnostic process by ensuring that quality assurance is maintained in the laboratory, by producing a pathological report that is clear, by ensuring that patient confidentiality is maintained, and so on. Nonetheless, acting in a way that is right and that furthers the goals that anatomical pathology aims to achieve in the chain of healthcare provision, further requires wisdom and experience to deal with difficult ethical dilemmas, the exercise of a set of professional virtues that aids anatomical pathologists to collaborate effectively with the treating clinician in such a way that diagnosis is beneficial to the patient. Furthermore, anatomical pathologists need to develop and exercise a set of virtues that allows them to negotiate disagreements in the anatomical pathologist-clinician relationship thereby ensuring that the goals of anatomical pathology are achieved.

For these reasons, the principles are insufficient, on their own, in providing complete moral guidance in anatomical pathology practice and would benefit from supplementation with a set of professional virtues and the identification of specific ends of different subfields of healthcare practice, which in turn allows for the identification of role-specific responsibilities of healthcare practitioners.

3.5 Conclusion

In this chapter, I set out to evaluate whether the principle-based approach, on its own, can serve as a complete moral guide to professional practice in clinical healthcare provision and more specifically, in anatomical pathology practice. I have shown that the pluralistic and universal structure of the principles (which has resulted in its popularity and widespread use in healthcare ethics) draws our attention to the need to identify the role that various practices have in the chain of healthcare provision, highlights the importance of character and the need for the identification of the specific ends of various healthcare disciplines. This in turn paves the way for establishing the role-virtues and role-specific responsibilities in order to avoid potential for conflict in the relationship between the anatomical pathologist and the clinician. As a result, the principles cannot claim to serve as a complete moral guide to solving issues encountered in healthcare provision.

I argued that this approach does little to recognise the value of role-dependent responsibilities associated with anatomical pathology practice and obscures the current goals of modern anatomical pathology. I concluded that there are gaps in the principle-based approach which require supplementation if they are to provide justification and practical guidance in ethical assessment in anatomical pathology practice.

Despite the gaps that I have presented in the principle-based approach, it is not to say that this approach has no place in ethical guidance. In my view, the principle-based approach represents an accessible and helpful guide in alerting anatomical pathologists towards the preliminary aspects to be considered in the ethical decision-making process. More importantly I believe, recognising and appreciating the context specific shortcomings of the principles in anatomical pathology practice, such as I have done in this chapter, presents the opportunity to consider the significance that character plays in ethical decision-making. My next task in chapter four, is to evaluate whether a virtue-based approach can serve as such a moral foundation, and I claim that it can.

CHAPTER 4: A VIRTUE-BASED APPROACH

4.1 Introduction

In the previous chapter, I discussed the gaps attributed to the use of the principle-based approach as the sole guide to addressing ethical issues that arise in the practice of modern anatomical pathology. To this end, I have shown that the principle-based approach provides insufficient guidance regarding the resolution of disagreements that may arise in the anatomical pathologist-clinician relationship, causing potential for conflict between the ethical responsibilities of the anatomical pathologist and those of the treating clinician. Furthermore, an evaluation of the principles in the context of indirect patient care, highlights the need to identify the specific ends of anatomical pathology practice in the chain of healthcare provision and the importance of character and role-specific responsibilities of the anatomical pathologist.

In the past few decades, a trend in ethics literature has emerged which has seen a renewed interest vis-á-vis the integration of virtue concepts in addressing ethical aspects of healthcare provision (Annas, 2015; Gardiner, 2003; Pellegrino, 2001). This renewed interest is owed, in part, to the realisation that the principles, on their own, cannot adequately account for the context-dependent and role-dependent nuances on moral reasoning and ethical decision making in healthcare provision (Gardiner, 2003; Pellegrino, 2005). Furthermore, there has been a renewed emphasis in the past few decades on the value of character which is of significance in the ethical decision-making process (Annas, 2015; Gardiner, 2003; Pellegrino, 2005; Shea, 2020).

Scholars in the field are also recognising that apart from evaluating virtuous character and motives, virtue approaches are also useful in providing a supportive ethical criterion of right and wrong action (Annas, 2015; Hursthouse, 1999; Slote, 2001; Swanton, 2001; Zagzebski, 2010). Such virtue-based approaches have been successfully integrated in various medical disciplines[33], most notably in those characterised by a direct relationship between the healthcare practitioner and the patient. By contrast, these trends have not extended to those

[33] See, for example, Meara, N.M., Schmidt, L.D. and Day, J.D. (1996a) Principles and virtues: A foundation for ethical decisions, policies, and character, *The Counseling Psychologist*, 24(1): 4–77.
Armstrong, Alan E. (2007). *Nursing Ethics: A Virtue-Based Approach*. Palgrave.
Horn, L. (2010). *Virtue ethics in the development of a framework for public health policy making* (Doctoral Thesis). Stellenbosch University.
Giblin, M.J. (2002). Beyond principles: Virtue ethics in hospice and palliative care. *American Journal of Hospice and Palliative Medicine.* 19(4):235-9.

medical specialities that function outside the classical healthcare practitioner-patient relationship. Such a practice is anatomical pathology,[34] which has largely been overlooked in terms of the integration of a set of virtues as a means of supplementing principled-based ethical approaches. This is a setback for the practice of anatomical pathology as the principled-based approach alone, as I have shown in the previous chapter, is inadequate in addressing some of the unique ethical aspects and potential conflicts, characteristic to the unusual relationships in the practice.

In a broad sense, virtue ethics is a moral theory that is attributed to ancient Greek philosophers, most notably Aristotle, and is concerned with, and primarily focused on, specific character traits (virtues) of good persons. The Aristotelian notion of virtue "is the most ancient, durable, and ubiquitous concept in the history of ethical theory" and finds grounding in a community which shares a common conception of what it means to be a good person and how a good life should be lived (Pellegrino, 1995: 254). From such a viewpoint, the moral fitness of actions is evaluated based on the kind of behaviours expected from a virtuous person in a comparable situation and by understanding how a good life should be lived.

Following an initial decline during the Enlightenment period when virtue-ethics was superseded by duty-based theories,[35] (Pellegrino, 1995), more recently, virtue-concepts have been revived by various contemporary authors, amongst others Alasdair MacIntyre, Rosalind Hurthouse, Julia Annas, and Edmund Pellegrino. These contemporary authors have revived virtue ethics and have placed it as a rival theory to the other major normative ethical theories. Virtue ethics "emphasizes the virtues, or moral character, in contrast to the approach that emphasizes duties or rules (deontology) or that emphasizes the consequences of actions (consequentialism)" (Hursthouse and Pettigrove, 2018: 1). In this way, the primacy of the moral agent's character provides justification for right action in virtue approaches and all the various forms of virtue ethics are agent-centred (Hursthouse and Pettigrove, 2018). Being agent-focused however, does not in any way mean that virtue approaches cannot also be concerned with other morally significant features, such as actions and the outcomes thereof (Hursthouse and Pettigrove, 2018). More recently, a variety of attractive modern forms of

[34] A literature review using search engines Pubmed and JSTOR reveals one article evaluating the application of virtues in pathology practice. The article is authored by Stempsey, W.E. (1989) titled 'The virtuous pathologist. An ethical basis for laboratory medicine'. Published in the *American Journal of Clinical Pathology*, 91(6): 730-8.

[35] Most notably deontology and consequentialism.

virtue approaches, have been put forward. These modern virtue-based theoretical structures are useful in evaluating the link between deontic notions of rightness and wrongness with aretaic notions of virtue and vice (Hursthouse and Pettigrove, 2018). Both traditional and contemporary virtue ethics approaches offer a broad perspective of moral life that includes character, motivations, emotions, and role-specific responsibilities, actions and their consequences (Garcia, 2020).

My aim in this chapter is to formulate a broad understanding of the origins, orientation, scope, strengths, and shortcomings of virtue ethics. On the basis of this understanding, I argue that virtue ethics is better suited in addressing the characteristic features of modern anatomical pathology practice than the principle-based approach. To achieve my aim, I explore both traditional Aristotelian notions of virtue ethics and Neo-Aristotelian views.

I begin section 4.2 by distinguishing between the various forms of virtue approaches that have been proposed through the years and outlining the characteristic features of these approaches. This is an important starting point since a significant variety of virtue theories have been proposed and within these different theories, there are considerable variations in terms of how the authors conceive virtues (Pettigrove, 2018). Then in section 4.3, I explore Aristotle's original virtue concepts which, to my mind, is an important point of departure for any exploration on virtue ethics. This point of departure provides an understanding of core virtue concepts such as *eudaimonia* or flourishing and the correlation between practical reasoning, virtues, emotions, and internal motivations, as the means of achieving a good life. It also provides the foundation for a conception of a teleological approach, which is evaluating things, including people and human professions, in terms of their final purpose. In sub-section 4.3.1, I also engage with the main objections levelled against traditional virtue ethics, most notably with the perceived lack of action-guidance and the difficulty in determining a common good for all individuals. I recognise that virtue ethics is generally criticised for the absence of a consensus regarding the goals and virtuous character of all individuals, in our modern-day society. I respond to this criticism by explaining that such lack of consensus is problematic for all normative moral theories and is not specific to virtue ethics alone (Hursthouse, 1999). I establish that virtues provide recommendation for an action plan in the form of virtue rules; these virtue rules are specifically helpful in guiding action in the context of professions that have well-established ends, such as in healthcare practice (Annas, 2015).

I then proceed in section 4.4 to explore Alasdair MacIntyre's modern reformulation of Aristotle's virtue ethics with specific focus on the concept of a 'practice' with internal goods and well-established ends or goals which has application for contextualising modern anatomical pathology as a 'practice'. I make the case that MacIntyre's approach is significant in the context of healthcare practice, as it facilitates the identification of the virtues that allow someone to be a good healthcare practitioner which ensures that the ends of the practice are served well. An understanding of a practice in the MacIntyrean sense with internal goods, specific ends, and virtues, paves the way for appreciating that virtue ethics makes specific demands within those practices in the form of role-virtues and role-specific responsibilities that arise as a result thereof.

In section 4.5, I search for an appropriate manner of combining the strengths of virtues with that of the principles and show how virtue ethics accommodates virtues as well as the principles thereby including the more specific rules derived from the principles.

I conclude that a virtue ethics has a genuine role to play in ethical discourse in the practice of modern anatomical pathology practice and is useful and valuable for the virtue ethics framework that I aim to develop in this thesis.

At this point, it is important to emphasise that my aim in this chapter is not to defend virtue ethics as a contender to other moral theories in their application in general ethics, but rather my aim is limited to the identification of the particular settings in which virtue ethics may provide valuable moral guidance. These noteworthy contexts in turn, aid in establishing those virtue concepts that could address the gaps previously identified in the principle-based approach as the building blocks for the development of my proposed virtue ethics framework. With this in view, I begin the section below by outlining the various forms of virtue ethics and the characteristics that distinguish different virtue ethical theories from each other as well as from the other ethical theories. This is important in identifying which forms of virtue ethics would be a suitable moral complement in the proposed virtue ethics framework for modern anatomical pathology practice.

4.2 Forms of virtue ethics

Virtue ethics is considered one of the three major ethical theories. A virtue-ethics approach has as its central focus the character traits or virtues of the moral agent (who reliably acts in a virtuous manner) in view of attaining a good life rather than in view of actions or outcomes

(Hursthouse and Pettigrove, 2018). This core feature sets it apart from the other two prominent normative theories which are consequentialism and deontology (Hursthouse and Pettigrove, 2018). Although the primary focus of virtue ethics is on virtues and the character of the moral agent, it does not mean that the other normative theories do not attend to virtues, as Hursthouse and Pettigrove (2018: 1) explain:

> This is not to say that only virtue ethicists attend to virtues, any more than it is to say that only consequentialists attend to consequences or only deontologists to rules. Each of the above-mentioned approaches can make room for virtues, consequences, and rules. Indeed, any plausible normative ethical theory will have something to say about all three.

In other words, any complete normative moral theory will take cognisance of an account of virtues, an account of correct action, as well as an account of the consequences of those actions and the motivations of the moral agents (Hursthouse and Pettigrove, 2018). By the same token, while the central focus of virtue ethics is on the character of the moral agent, this does not mean that virtue ethics cannot attend to evaluating right and wrong actions or to exploring other features, such as consequences (Hursthouse and Pettigrove, 2018). Indeed, modern virtue ethicists provide a systematic account of evaluating deontic notions of right conduct in terms of aretaic notions of virtue and vice; the distinction then lies in the fundamentality that virtues (and vices) play within the theory (Hursthouse and Pettigrove, 2018). For consequentialists, virtues are important in terms of their outcomes while for deontologists, virtues are important in performing one's obligations (Hursthouse and Pettigrove, 2018).

The revival of virtue ethics is credited to G.E.M Anscombe's impactful manuscript in 1958, titled "Modern Moral Philosophy". In this manuscript, she details her dissatisfaction with the dominant deontological and utilitarian approaches at the time. In her view, these approaches abandon the more holistic understanding of a fulfilled human life, thereby overshadowing important aspects of moral life, such as character, intentions, discernment, and relationships (Anscombe, 1958). She notes that evaluating what is an admissible action as opposed to an inadmissible action, is dependent on the acceptance that a set of rules are imposed on us by a Supreme Law Giver (Anscombe, 1958). However, modern duty-based theories have since detached from the theological foundations, and in their absence, the theory becomes unintelligible (Anscombe, 1958). Anscombe makes the plea for either a return to virtue ethics or a return to a more religious foundation for an ethical system centred on obligation

(Anscombe, 1958). Following in her footsteps, Philippa Foot considers that if we abandon fundamental concepts of human well-being, moral discourse becomes senseless (Foot, 1978). The realisation that concepts of human well-being and virtue-concepts are indeed significant in ethical analysis, including bioethics, has in turn, led to the incorporation of these virtue elements (most notably focusing on character) in various other ethical approaches, including the principle-based approach (Beauchamp and Childress, 2013). However, to understand virtue ethics, it is important to appreciate that it is a normative theory which makes claims not only about character traits but also about "actions, choices, and decisions, and (sometimes brief) emotional responses or reactions" (Garcia, 2020: 473). Furthermore, from such a viewpoint, a person does not necessarily have to be virtuous, for her decisions and behaviours to be considered virtuous (Garcia, 2020).

Interestingly, virtue ethics has been shaped by several authors[36] through the years, with different authors at times focusing on specific scopes and functions of the theory and advancing different definitions of virtues (Spielthenner, 2017; Pettigrove, 2018). Given that the initial revival of virtue ethics in the mid-nineteen-seventies was predominantly influenced by an Aristotelian view, it is to be expected that most virtue ethics approaches have a Neo-Aristotelian nuance (Pettigrove, 2018). More recently a few variants to the classical Neo-Aristotelian approaches have been proposed as well as the so-called agent-based virtue ethics approaches (Pettigrove, 2018). This has led to the emergence of several forms of virtue ethics (which are either characterised by being eudaimonistic, agent-based, target-centred or Platonistic), each striving to evaluate what the expected behaviours from moral agents are in specific contexts, or how a good life should be lived (Van Zyl, 2011).

Although different in some respects, a common thread amongst the various forms of virtue ethics is the centrality of virtue and practical wisdom, as key ingredients along with the following three common claims. These claims are that:

> Moral philosophy should be concerned with the agent, as well as with choice and action; moral philosophy should therefore concern itself with motive and intention, emotion and desire; moral philosophy should focus not only on isolated acts of choice, but also,

[36] Including, amongst others, G.E.M Anscombe, Alasdair MacIntyre, Philippa Foot, Martha Nussbaum, Roger Crisp, Rosalind Hursthouse, Glenn Pettigrove, Edmund Pellegrino, Michael Slote, Christine Swanton, Linda Zagzebski, Liezl Van Zyl and Julia Annas.

> and more importantly, on the whole course of the agent's moral life, its patterns of commitment, conduct, and also passion (Nussbaum, 1999: 170).

Moral reasoning from a virtue ethics perspective is founded on a notion of the "rationality of virtue itself" (Crisp and Slote, 1997: 3). In other words, from a virtue ethics perspective, an individual will refrain from lying not because it contravenes a moral law, but rather because lying is dishonest and virtuous individuals are able to recognise it in that light (Horn, 2010). These features distinguish virtue ethics from the commonly used normative ethics that are characterised by the following two features:

> (1) The focus on evaluating actions rather than agents and (2) the focus on evaluating actions in 'deontic' terms, that is, as either morally right (permissible or obligatory) or morally wrong (impermissible or contrary to obligation) (Van Zyl, 2011: 103).

These distinguishing features have also created an impression that virtue ethics is not action guiding and over the years, virtue ethicists have attempted to show that such is not the case. To this end, some authors provide an "account of right (and wrong) action, together with related deontic notions such as 'permissible', 'obligatory' and 'prohibited'…most modern virtue ethicists have tried to derive an account of right action from the aretaic"[37](Van Zyl, 2011: 103). Modern virtue ethicists propose several alternative forms to the Aristotelian approach; which have broadened the variety of theoretical structures available to virtue ethicists in systematically evaluating the connection between deontic claims and aretaic concepts (Pettigrove, 2018).

While I concede that virtue ethics has been studied and interpreted by various contemporary writers, I limit my evaluation in this chapter to the original concepts of Aristotle's teleological account; the notion of a practice with internal goods advanced by Alasdair McIntyre, and the action-guiding virtue-rules that Rosalind Hursthouse and Julia Annas propose. I claim that virtue ethics is suitable in addressing the gaps previously identified in the principle-based approach and provides pertinent action guidance and insight which is meaningful for the virtue ethics framework that I aim to develop in this thesis.

With any discussion in reference to virtue ethics, it seems appropriate to first and foremost, begin with an analysis of the original Aristotelian concepts; this provides the foundation for

[37] The significance of the word *aretaic* pertains to virtue or excellence.

understanding which ingredients are essential for living a good life and how virtues lead to the attainment of this good life. An exploration of Aristotle's virtue ethics also provides the background for understanding the most frequently applied approach to professional ethics that is teleological in nature; meaning an approach based on a specific end that is definitive of a specific activity.

4.3 Aristotle's eudaimonism

I begin my exploration of virtue ethics with an analysis of Aristotle's original concepts, while recognising that other Greek philosophers from that era, amongst others, Socrates and Plato, as well as the Italian philosopher and theologian, Thomas Aquinas, advance similar viewpoints. This is a significant starting point for understanding virtue ethics, since most contemporary authors who discuss or apply this theory, refer to some extent, to the original concepts of *eudaimonia* or human flourishing, well-being, practical reasoning, and virtues as the means through which certain ends are achieved. According to Aristotle's eudaimonism, well-being consists in living a life in accordance with virtues and an act is evaluated in terms of virtue and vice; a virtue is further defined as a trait that is needed to achieve a fulfilled human life. Well-being is considered to hold prudential value in considering that which is good for an individual and that which leads to a fulfilled human life and in considering the kind of lives we should pursue (Rodogno, 2015). This concept of human well-being is also noteworthy in the application of virtue concepts in professional practice in the context of which certain goals are specified and achieved through the exercise of specific virtues.

In his book, *Nichomachean Ethics*, Aristotle is primarily concerned with deciphering the ingredients of human well-being and addresses how people become good or virtuous as exemplified in the quotation below:

> Since the branch of Philosophy on which we are at present engaged is not, like the others, theoretical in its aim - because we are studying not to know what goodness is about, but how to become good men, since otherwise it would be useless - we must apply our minds as to how our actions should be performed (NE II, ii,1103b26-31).

Aristotle believes that every living being in the natural world instinctively strives to achieve a specific and intrinsic final purpose and conversely, this final purpose is the ultimate good for all living beings (Aristotle, Thomson and Tredennick, 1976). Concerning the final purpose of human beings, Aristotle believes that this purpose is to achieve a state of *eudaimonia*, generally

understood as happiness but best interpreted to signify "a fulfilled life" (Hughes, 2001:22). A characteristic aspect of Aristotle's moral argument is that people cannot achieve happiness and be accomplished in life if they do not develop certain moral virtues and importantly, exercise these virtues persistently as "one swallow does not make a summer; neither does one day" (NE I, vii 1098a19-21). The term 'virtue' finds its origins in the Latin word *virtus* which can be generally translated as excellence; for Aristotle this is *arête.*[38] "Virtue, therefore refers to an excellence of its kind" (Spielthenner, 2017:17). A virtue can be defined as "trait of character, manifested in habitual action, that it is good for a person to have" (Rachels, 1999: 178). In turn, traits of character can be defined as "relatively stable and enduring psychological dispositions or tendencies to act in characteristic ways" (Spielthenner, 2017:17). "Since virtues are excellent traits of character, they are dispositions to act well" and these traits are distinct from "abilities, skills, talents, and a person's temperament"; the opposite of virtue is considered vice (Spielthenner, 2017:17). Aristotle is of the view that the virtues of courage, temperance, patience, friendliness, modesty, amongst others, are essential in the achievement of a fulfilled life (Aristotle, Thomson and Tredennick, 1976). Another important, yet controversial aspect of Aristotle's moral argument, is that virtues can be assimilated through practice and by observing and emulating those who already have a well-developed virtuous character (Aristotle, Thomson and Tredennick, 1976).

For Aristotle, establishing what virtue is, can be achieved through what he calls the Doctrine of the Mean which represents the proper balance between extremes (Aristotle, Thomson and Tredennick, 1976). The Doctrine of the Mean, also commonly referred to as the golden mean, is most often exemplified by the virtues of courage which represents the "mean between 'foolhardiness and cowardice'" (Gardiner, 2003: 298). According to the golden mean, for the person to become courageous, he or she must habitually perform courageously which enables the development of the virtue of courage; cowardice involves a deficiency in confidence and an excess of fear; foolhardiness involves excessive confidence and too little fear (Gardiner, 2003). Annas explains how a virtuous character develops, she writes (2015: 3):

> How can I become brave in such a way that bravery is characteristic of me, constitutive of the kind of person I am? The answer since Aristotle, and it's never been battered, is

[38] The Greek term for *aretē* was translated by Roman savants to the term *virtus* in Latin (Spielthenner, 2017).

> habituation, a process of learning. Becoming brave is an ongoing process of learning, which starts in adulthood and continues all my life. It needs experience and the ability to deal with experiences in ways that intelligently appreciate what is worthwhile and what is not.

Apart from habituation, to attain the golden mean, Aristotle suggests that people need to also manifest suitable emotions which become essential elements in ethical deliberations that lead to virtuous actions. This implies that, anger expressed in the right context can be appropriate, for example, expressing anger in cases of prejudice. On the other hand, certain emotions and actions are always deemed immoral for Aristotle despite the context, such as jealousy and spite, or murder and adultery (Aristotle, Thomson and Tredennick, 1976).

Aristotle conceives virtues as having two specific expressions, those expressed as *Sophia* (generally translated to wisdom) and those expressed as *Phronesis* (generally translated to practical wisdom) (Aristotle, Thomson and Tredennick, 1976). The virtues of Sophia and Phronesis are essential components, in his view, in the construction of the human soul (Aristotle, Thomson and Tredennick, 1976). The human soul, as described by Aristotle, can be conceived as the internal disposition or essence of everything in the natural world, both living and non-living (Aristotle, Thomson and Tredennick, 1976). From these virtues, practical wisdom is an essential constituent of his view of morality. This is because practical wisdom is that virtue which equips the moral agent with the discernment necessary to differentiate what is right and what is wrong in each situation which is further dependent on the awareness and experience of the moral agent in regard to the expectations of particular virtues (Horn, 2010). "Virtue determines the end; practical wisdom makes us do what is conducive to the end" (NE 1145a5-6). In this way, practical wisdom is " strengthened every time one is faced with a new situation that requires moral deliberation and choice" (Horn, 2010: 46).

A noteworthy distinction made by Aristotle is between a natural virtue and a mature or a full virtue. This is an important distinction between a virtuous person having developed *phronesis* from a person that has the right motivation but is not fully virtuous. He writes:

> We must inquire again also about Virtue: for it may be divided into Natural Virtue and Mature, which beat each other in relation similar to that which Practical Wisdom bears to Cleverness, one not of identity but resemblance (Aristotle, 1998: 111).

An influential aspect in Aristotle's search for the meaning of a good life is the introduction of a teleological perspective, which is a way of analysing and thinking of everything in view of

their aims, final purpose, or *telos* (Aristotle, Thomson and Tredennick, 1976*).* He proposes the much disputed 'function argument' based on which, arriving at a clear understanding of what it means to have a good life requires first, the identification of the function of human beings (Aristotle, Thomson and Tredennick, 1976). From Aristotle's teleological perspective "for all things that have a function or activity, the good and the 'well' is thought to reside in the function" (NE 1.7 1097b26–27). For Aristotle then, all things, including animals and humans, as well as professional activities, have a particular function. The function of a good knife is, for example, to cut effectively, while the function of political leaders is to govern effectively in pursuit of what is deemed good for the citizens and the function of human beings is to live life effectively in pursuit of a fulfilled life (Aristotle, Thomson and Tredennick, 1976).

Aristotle considers that virtue has a teleological function both in respect to the attainment of a fulfilled human life and in the attainment of excellence in a profession. This teleological viewpoint has been applied to medical practice in the form of:

> An ethic based in the notion of the good as an end of moral acts wherein 'good' is defined in terms of the nature of the activity in question, that for which the activity exists (Pellegrino, 2005: 23).

On such a teleological account, in which virtues are assumed from the supposed end for human beings, professional virtues are similarly assumed from evaluating the sort of character traits that assist professionals to meet the end(s) of the specific profession (Spielthenner, 2017). In other words, a virtue is defined as that quality that aids something or someone to fulfil their function well (Spielthenner, 2017). The virtues of a professional are those traits or features that allow them to fulfil their function(s) well, otherwise stated allows them to be a good professional. Such a viewpoint has important application for professional ethics, on the basis of which internal goods and virtues are established from a specific end of a practice (Spielthenner, 2017). Furthermore, this teleological perspective is useful in the context of professional healthcare practice as "it links moral excellence (the moral virtues) with the kind of person the physician should be and with the excellence of the work he does specific to his profession" (Pellegrino, 2002: 380). From such a perspective, "professional virtues are traits of character (or personality) that help a professional to serve a profession's purpose(s) well" (Spielthenner, 2017:19-20). As Spielthenner (2017: 17) puts it:

> Just as Aristotle's virtues are derived from an (assumed) end of human beings, so are professional virtues those character traits which a professional needs for serving the

end of his profession. Calmness is arguably a virtue of airline pilots because it is needed when dealing with challenging weather conditions (being panicky would be a vice), and compassion is a virtue of doctors if this trait is needed to serve the goal of the medical profession well.

4.3.1 Criticism of Aristotelian conception of virtue

Some critical remarks have been directed towards Aristotle's views on morality and living a good life. These remarks pertain to the perceived vagueness in guiding action (given the so-called circularity of justification) and the difficulty with the practical application of virtues to specific moral dilemmas, which in turn, it is claimed, makes virtue ethics unable to be considered a genuine rival to competing moral theories (Hursthouse, 1999). The criticism is summarised by Hursthouse (1999: 29) as follows:

> If virtue ethics is 'agent-centred rather than act-centred, concerned with 'What sort of person should I be' rather than 'What sorts of action should I do?' (with 'Being rather than Doing'), if it concentrates on the good or *virtuous* agent rather than on *right* action and what anyone, virtuous or not, has an obligation to do; how can it be a genuine rival to utilitarianism and deontology? Surely ethical theories are supposed to tell us about right action, i.e., about what sorts of act we should do. Utilitarianism and deontology certainly do that; if virtue ethics does not, it cannot be a genuine rival to them.

In other words, Aristotle's concern with virtuous character is such that he seems to intentionally neglect to specify what right acts and choices are and, in this way, provides an open-ended guide to action (Louden, 1984; Pellegrino, 1995). In so doing, his concepts fail to answer the important question of what one should do. This for Louden, represents a significant shortcoming since there is a general expectation from any moral theory to provide some form of recommendation on action in resolving moral dilemmas (1984). The only support for action that Aristotle provides is to consider what a person, who has already developed a virtuous character would do in a similar situation and emulate such a person (Louden, 1984). Aristotle then sets up the following dilemma; if emulating a virtuous person can assist in answering the question of, what one should do, how then should one identify who the virtuous people that should be emulated, are? (Louden, 1984). Aristotle does mention Pericles "and men like him" as virtuous and provides the following explanation as them being virtuous "because they can see what is good for themselves and what is good for men in general" (NE 1140b8-10). Louden provides a plausible explanation for the reason Aristotle does not seem to think that it is

necessary to elaborate further on examples of virtuous individuals. He suggests that "Aristotle is dealing with a small face to face community, where the pool of potential *phronimoi* generally come from certain well-established families who are well known throughout the *polis"*[39] (Louden, 1984: 233). Pericles, for example, is considered to be a good, well-respected and influential statesman and general of Athens, known for the political and cultural development of a democratic Athenian community (Encyclopedia Britannica, 2021). Aristotle's virtue ethics is directed specifically at such a small and well-ordered community in which individuals know and understand each other, a community in which it would not seem problematic to achieve wide agreement regarding values, norms, and admirable character traits of virtuous people (Louden, 1984). It would then not seem imperative to pinpoint the specific admirable features of those well-known virtuous individuals (Louden, 1984). Understanding the context from which virtue-ethics emanates is significant in acknowledging that there are limitations in the application of this form of moral reasoning to the types of well-ordered contexts in which they were originally developed (Guinebert, 2020). However, as Louden points out, most subsequent discussions of contemporary virtue ethics seems to "divorce this strategy from its social and economic roots and then to apply it to a very different sort of community" (Louden, 1984: 233). Such a modern community is very different than the traditional Greek community, in that it is represented by a diverse multicultural community in which consensus and wide agreement on values, norms and virtues would be more difficult to reach, compared to that of the *polis* of Aristotle (Louden, 1984). Nevertheless, there are limited contexts in which:

> The adoption of virtues leads to a kind of personal order that works to orient and guide a good life, and thereby is still of great value at least in the personal and intimate sphere (Guinebert, 2020: 290).

This view is similarly shared by Beauchamp and Childress who consider that there are specific situations and circumstances in healthcare provision in which there is great scope for virtue ethics, particularly in the narrow context of relationships of trust, such as those found in healthcare (Beauchamp and Childress, 2013).

There are further difficulties with Aristotle's concepts of virtuous people, even once we identify the virtuous individuals to emulate (difficult as that may be) (Louden, 1984). There seems to be a danger in not recognising that even virtuous people can act out of character at

[39] The word *polis* is translated as city from Greek.

times (Louden, 1984). Louden warns against what he calls "moral backsliding" which runs the "risk of overlooking occasional lies or acts of selfishness on the ground that such performances are mere temporary aberrations-acts out of character" (Louden, 1984: 231). Furthermore, the idea of man with an inherent intrinsic function, or a specific *telos* has been disputed by critics of virtue ethics and it is also not clear how a potential conflict between virtues would be resolved (Frankena, 1973; Veatch, 2001). Lastly, the traditional view of virtues as traits of excellence seems to make excessive demands on individuals (Pellegrino, 1995). In this respect, Pellegrino states that:

> In a legalistically shaped society- one that, in addition, emphasizes individual choices and lifestyle…the only duty is not to infringe on the liberty of others. Everything else is beyond duty. In such a setting, virtue in the classical sense is too much to ask of individuals or communities and institutions (Pellegrino, 1995: 263).

In the remaining section of this chapter, I turn my attention to the response to the criticism levelled against Aristotle's virtue ethics by modern virtue ethicists, Rosalind Hursthouse and Julia Annas. These modern accounts tackle some of the most frequent criticism attributed to Aristotelian virtue accounts; that is the lack of a systematic approach for determining right action from virtue concepts.

As previously mentioned, one of the most frequent critique directed against virtue ethics is that the emphasis on character detracts from more practical deontic notions of right and wrong actions and in this way, virtue ethics is incapable of providing action guidance adequately and systematically (Swanton, 2001). Annas describes the term action guidance as a situation in which "I am faced by a hard decision, and need guidance as to what to do: what is it that I need?" (Annas, 2015: 6). In the quest to show that virtue ethics does provide a specific and structured account of right action, several virtue ethicists provide a systematic link between and an accurate account of "deontic notions defining actions (as either 'permissible', 'obligatory' or 'prohibited') in considerations of virtues" (Van Zyl, 2011: 103). This type of approach, that evaluates the moral permissibility of actions depending on how the correct action stands with respect to the virtues, is believed to have its origins in, amongst others, the writings of religious philosophers, Duns Scotus, James Martineau, and Josiah Royce (Zagzebski, 2010).

Given that traditional virtue ethics approaches are considered to be orientated towards answering the question of how to develop good character traits in the interest of becoming a good person, virtue ethics is represented in the following ways:

> It is described (1) as an ethics which is 'agent-centered' rather than 'act-centered'; (2) as concerned with Being rather than Doing; (3) as addressing itself to the question, 'What sort of person should I be?' rather than the question, 'What sort of action should I do?'; (4) as taking certain aretaic concepts (good, excellence, virtue) as basic rather than deontic ones (right, duty, obligation); (5) as rejecting the idea that ethics is codifiable in rules or principles that can provide specific action guidance (Hursthouse, 2001: 25).

However, Hursthouse argues that these characterisations of virtue ethics "are seriously misleading" as it gives the impression "that virtue ethics cannot be a genuine rival to utilitarianism and deontology" (Hursthouse, 1999: 29). By contrasting virtue ethics to its rival normative accounts, she shows that virtue ethics does indeed offer adequate action guidance. She reveals how each of the virtues gives rise to a specific instruction or rule. "Not only does each virtue generate a prescription- do what is honest, charitable, generous- but each vice a prohibition- do not do what is dishonest, uncharitable, mean" (Hursthouse, 1999: 39). Hursthouse demonstrates that, although the central focus is indeed on the character of the moral agent (by evaluating virtue and vice) virtue ethics is also concerned with evaluating actions, intention, and behaviours in terms of aretaic concepts, she writes (1999, 33):

> Virtue ethics (in its account of right action) is agent-centred rather than consequences- or rules-centred. It is agent-centred in that it introduces the concept of the virtuous *agent* in the first premise of its account of right action, where utilitarianism and deontology introduce the concept of c*onsequences* and *moral rule* respectively. But note that it is not thereby agent centred *rather than* act centred. It has an answer to 'How shall I decide what to do'?

At this point, it is helpful to appeal to the comparison provided by Hursthouse between the methodology for action used by deontology versus that provided by virtue ethics. She eloquently shows that although these two approaches have different starting points, they offer a similar methodology in ethical decision-making. She writes (Hursthouse, 1999: 30-1):

> Many simple versions of deontology can be laid out in a way that displays the same basic structure. They begin with a premise providing a specification of right action: P1. An action is right iff it is in accordance with a correct moral rule or principles.

She goes on to note that this initial premise (Hursthouse, 1999: 31):

> Gives one no action about how to act, until, in this case, one knows what to count as a correct moral rule (or principle). So this must be specified in a second premise, which begins: P2. A correct moral rule (principle) is one that…

The second premise in the deontological methodology, requires further elaboration as to what the correct rule would be, this could be in the form of a list of rules or principles, "or is laid down for us by God, or is universalizable/ a categorical imperative" (Hursthouse 1999: 31).

Hursthouse then explains that, using a similar methodology, virtue ethics provides "a non-deontological specification of the virtuous agent *via* a specification of the virtues, which will be given in its second premise", as follows (1999: 32-3):

> P1a. A virtuous agent is one who has, and exercises, certain character traits, namely, the virtues. P2. A virtue is a character trait that…

The last premise similarly requires completion either with a list of virtues or "with the standard neo-Aristotelian completion that a virtue is a character trait that a human being needs for eudaimonia, to flourish or live well" (Hursthouse, 1999: 33). In this way, she shows that both deontology and virtue ethics provide the second premise to fill in the specifics of the first and that both provide an "open-ended and familiar, list in their second premise" (Hursthouse, 1999: 38). Once the premises have been specified, deontology generates a set of principles or rules while virtues generate what Hursthouse calls virtue-rules. She explains that these virtue rules or 'V-rules' serve as a recommendation to act in line with the virtue; an honest agent is compelled by the V-rule to act honestly and hence, that agent would not lie. The V-rules are the equivalent of those rules provided by other moral theories, such as deontology (Hursthouse, 1999). Put differently, V-rules in the form of, for example "be honest" entails that "you are being directed to respond to this situation honestly, rather than dishonestly or indifferently" (Annas, 2015: 7). Virtue ethics then tells us that we should do what is virtuous and we should not do what is vicious (Annas, 2015).

The concern that virtue ethics is focused on character to the detriment of action is thus unwarranted. Rather virtue ethics shows us that while indeed, character is the primary focus in

the ethical decision-making process, an evaluation of character extends to an evaluation of duties, consequences, emotions, motivations which together help in the establishment of a virtuous character (Annas, 2015; Hursthouse, 1999). The opposite can be said for deontology for which the starting point are represented by the principles from which virtues are derived (Hursthouse, 1999).

In my view virtue ethics is just as capable of providing clear instructions for action as any of the other normative theories, with the added advantage that emotions, motivations, relationships and character form part and parcel of the action-guiding process. The most notable features of virtue ethics, in the context of the virtue ethics framework that I aim to develop in this thesis can be outlined as follows. Apart from assisting anatomical pathologists in making right or virtuous decisions, it also guides the practitioners towards the development of a virtuous character, through role modelling and the continued exercise and improvement of character traits and an understanding of how practitioners can become good anatomical pathologists that serve the ends of the practice adequately.

In sum, I agree with the criticism that it would be difficult to reach consensus regarding the goods for all individuals and the *telos* of a human life is difficult to conceive in contemporary ethics. However, I do not agree that this challenge makes virtue ethics unable to contend with other moral theories, given that this lack of consensus in not only problematic for virtue ethics, but for other moral theories as well. For example, deontologists might also have difficulty in reaching consensus regarding a list of duties that are universally acceptable, but that does not mean that deontology is not a feasible moral theory (Hursthouse, 1999). Furthermore, I cannot share the view that virtue ethics does not provide adequate action guidance. As shown by Hursthouse and Annas, virtue makes strong demands for right responses or right action through virtue rules which are particularly helpful in providing guidance in the context of healthcare. It is within these contexts, that the cultivation and exercise of certain virtues is valuable by assisting individuals in achieving excellence and fulfilment. In personal and professional ethics, virtue ethics is useful in that it relates virtues to duties and to the internal goods and goals of a profession; in other words, in those end-directed relationships (Spielthenner, 2017).

Having outlined the origins, scope and contexts in which Aristotelian virtues concepts can be helpful, I now turn my attention to describing MacIntyre's contemporary teleological virtue approach in which he explains the role of virtues and internal goods that are constitutive of a

practice. This teleological approach has significant application in professional ethics, in understanding how virtues enable those in the practice to achieve the goals of the practice.

4.4 Alasdair MacIntyre's concept of a practice

In his book, *After Virtue: A Study in Moral Theory,* MacIntyre criticises modern philosophy and the idea that morality can be categorized and explained by a set of rules and concepts of duty or utility. He proposes a substitute for modern morality which is reliant on Aristotle's teleological views. MacIntyre's views share many similarities to those of Aristotle, in that he too advances a teleological account based on a specific *telos,* the attainment of which is reliant on the exercise of specific virtues. There are however, two distinguishing features in MacIntyre's account of virtue ethics. The first is the initial rejection that notions of human nature with an inherent intrinsic function that he calls the "metaphysical biology" play a role in determining the virtues and goods in moral life (MacIntyre, 1984). The second is the acknowledgement that in modern times, there may be many goods and many practices which may at times, be in conflict with one another (MacIntyre, 1984).

MacIntyre claims that virtues, which have been largely neglected by modern philosophy are important in achieving the goals in social and professional practices and defines a virtue as an (1984:191):

> Acquired human quality the possession and exercise of which tends to enable us to achieve those goods which are internal to practices and the lack of which effectively prevents us from achieving any such goods.

From MacIntyre's perspective, one cannot discuss virtues in the absence of examining a practice in further detail. For him, practices can be identified by various collective human activities and occupations that are characterised by having specific standards of excellence that are inherent to those specific activities (MacIntyre, 1984). He takes the view that morality is dependent on "socially local and particular" and that virtues are an indispensable part of living a moral life (MacIntyre, 1984: 126). He also considers that "there is no way to possess the virtues except as part of a tradition in which we inherit them and our understanding of them from a series of predecessors" (MacIntyre, 1984: 127). MacIntyre's definition of a practice is (1984: 187):

> Any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying

> to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended.

Some examples that he offers to illustrate his intended meaning of a practice are playing chess, portrait painting and medicine. As a simplistic illustration of how one can start conceptualising virtues in the context of a practice, I take the example of a game of tennis. From a virtue ethics vantage point, the qualities and character traits of a tennis player are intrinsic to considerations of what it takes and what it means to be a good tennis player. Being a good tennis player from such a viewpoint means participating in all the facets of the sport and having due regard for the specific standards of excellence inherent to the game, which are not reduced to the technical ball skills and the ability of winning matches and acquiring trophies. The standards of excellence in the game would also extend to the development and exercise of certain character traits, for instance, those traits and attitudes of good sportsmanship in addition to the technical abilities which collectively characterise a good tennis player. Such a simple analogy is helpful when considering virtue ethics in general and specifically in healthcare practice. The character traits of healthcare practitioners are important in considering all facets of professional practice which includes emotions, relationships, character traits, ideals, or specific standards of excellence inherent to the practice and internal motivations. To be a good healthcare practitioner then, entails not merely having the technical skills and expertise, but also developing specific character traits or virtues which will enable and further the ends of healthcare practice (Pellegrino, 2001).

Furthermore, an important feature of a practice from MacIntyre's perspective, is that specific goods are achieved within the practice. These goods can be of two types, internal goods (inherent to the practice) and external goods (extrinsic to the practice) (MacIntyre, 1984). An important characteristic of internal goods is that "their achievement is good for the whole community who participate in the practice" and that they have value in themselves (MacIntyre, 1984: 190). External goods, on the other hand, are those that can be achieved in any other practice and are not inherent to the practice, for instance, economic profit (MacIntyre, 1984). He is also of the view, akin to that of Aristotle, that virtues must be exercised habitually otherwise they cannot achieve the desired ends of a practice as "we cannot be genuinely courageous or truthful and be so only on occasion" (MacIntyre, 1984: 198). Much like Aristotle, MacIntyre believes that virtues are essential in attaining the internal goods of the

specific practice. MacIntyre's virtue ethics approach also relies heavily on concepts of traditions (1984). In his view, we all live in relation to, and dependence on one another in social, cultural and professional contexts which directly impacts on our views of what a fulfilled life means (MacIntyre, 1984). For MacIntyre, we are all part of a community which is shaped by a specific history which critically influences our notions of a fulfilled life (MacIntyre, 1984). Similarly, the professions that we participate in, are also shaped by previous experiences and history (MacIntyre, 1984).

MacIntyre also criticises modern moral philosophy for the discord that it creates between technical excellence and moral excellence. He considers that the goods and ends of these socially determined activities consist of both technical and moral elements which should not be viewed in isolation (MacIntyre, 1984). One last important aspect which is significant to note is the link between virtues, internal goods, and ends. Virtues exemplify an active pursuit of excellence, the standards of which are determined within the specific practice and "the goods and ends of specific practices inform the way that moral concepts like "excellence" and "virtue" are understood" (Symons, 2019: 245). Practices contribute to human flourishing, for example healthcare is seen as a practice that:

> Contributes to human flourishing insofar as it restores patients to health and allows them to engage in the sort of activities that are constitutive of flourishing. It also fulfils the medical practitioner insofar as she is actualizing her skills as a physician (Symons, 2019: 245).

To summarise, MacIntyre considers that practices, whether social or professional, as well as our moral lives, are constructed in a teleological sense towards a particular end and goods internal to those specific practices. He argues that virtue ethics is meaningful and applicable across time and culture.

Nonetheless, his views on virtue ethics have not gone undisputed. Maclntyre does acknowledge the complexities of his virtue ethics approach in the absence of common notions of good in various communities and traditions[40] (1984). Indeed, his reliance on tradition as a guide to moral reasoning could prove problematic if these traditions are themselves found to be morally unjustifiable (Horn, 2010).

[40] Due to MacIntyre's strong emphasis on customs and traditions his views are criticised as advocating for traditionalism (Schneewind, 1991).

Another perceived shortcoming in MacIntyre's virtue ethics approach, much the same as traditional virtue ethics, is its centredness on the character of the moral agent. As such, the main thrust is on "long-term characteristic patterns of action intentionally downplaying atomic acts and particular choice situations in the process" (Louden, 1984: 229). In this way, by focusing predominantly on character, virtue ethics is considered to be unable to offer concrete problem-solving solutions or answers to moral dilemmas as "it speaks of rules and principles only in a derivative manner" (Louden, 1984: 230). According to Louden, these "derivative oughts are frequently too vague and unhelpful for persons who have not yet acquired the requisite moral insight and sensitivity" (Louden, 1984: 230). Moreover, Pellegrino considers that, MacIntyre's approach suffers similar shortcomings attributed to traditional virtue-ethics; that of being vague and circular in justifications which is problematic, as he explains (1995: 262):

> The good is that which the virtuous person does, and the virtuous person is the person who does what is good for humans. Some grounding for virtue outside of this circular logic is necessary if the redundancy of this logic is to be avoided. Otherwise, virtue can become so intuitive and subjective as to be meaningless. What is virtue to one person's community is vice to another's. What some find "agreeable" to use Hume's term—others find disagreeable with equal intensity.

In response to this criticism, as previously mentioned, virtue ethicist, Hursthouse, challenges this viewpoint and considers that it is a mistake to think that virtue ethics does not provide an account of right and wrong action. She argues that the criteria for action guidance is precisely that which would be expected from someone who has developed a virtuous character (Hursthouse, 2001). She acknowledges the criticism that it may seem difficult to know what someone with a virtuous character would do which may lead to the false impression that "if I am less than fully virtuous, I shall have no idea what a virtuous agent would do, and hence cannot apply the only prescription virtue ethics has given me" (Hursthouse, 1999: 38). Her response to this criticism is as follows (Hursthouse, 1999: 39):

> If I know that I am far from perfect and am unclear what a virtuous agent would do in the circumstances in which I find myself, the obvious thing to do is to go and ask one, should this be possible. This is far from being a trivial point, for it gives a straightforward explanation of an important aspects of our moral life, namely the fact that we do not always act as 'autonomous', utterly self-determining agents, but quite

> often seek moral guidance from people we think are morally better than ourselves. If you want to do what is right and doing what is right is doing what a virtuous agent would do in the circumstances, then you should find out what she would do if you do not already know.

Apart for its perceived lack of action guidance, a further criticism of MacIntyre's approach is related to what is presented as the hallmark of virtue ethics similarly expressed in Aristotle's views which is the search for the common good, both at an individual level or at a community level in a well-order society. However, in modern times, characterised by a multicultural society, consensus is difficult to achieve regarding a common good for all. Since such a community with shared values and shared notions of good is at the heart of virtue ethics, I agree with Pellegrino that such consensus would be difficult to achieve, as he explains (1995:262):

> A virtue-based ethics depends upon the grasp by the virtuous person of the good for humans in such a reliable way that, no matter what the act or the circumstances may be, that person will know how to attain the good. Such an open-ended guide to moral choice is sustainable only if there is, in fact, some agreement on the good for humans. This standard has been both the strength and the weakness of virtue-based ethics, the reason for its durability, but also for its fragility.

Nonetheless other moral theories, as previously discussed, would have similar difficulties in reaching consensus, whether about duties or consequences.

The way I understand Aristotelian and MacIntyrean virtue ethics in its general application in moral assessment, suggests that although there may be difficulty in agreeing on a common good for all mankind, this moral theory does provide complete moral guidance which translates into directives and justification for action. More importantly, there is significant scope for application in a more limited personal sphere and in the context of well-defined relationships in which consensus about a common good can be achieved. In view of this, there are several elements in MacIntyre's approach which are meaningful in understanding healthcare as a practice and relate to the virtue ethics framework for modern anatomical pathology. I summarise these meaningful elements in bullet form, as follows (MacIntyre, 1984):

- Entering a practice entails that those specific standards of excellence are accepted and pursued in the practice; practitioners can thus be judged based on these standards of excellence.

- Internal goods are practice-specific and defined within each practice; these internal goods are recognised by both the experience and participation in that specific practice.
- Virtues are integral to a practice; it is through the exercise of these virtues that the goods internal to the practice are achieved, either individually or collectively, within the practice.
- Exercising virtues allows us to flourish in social and professional practices and sustain the relationships with each other, based on our dependency and vulnerability.
- Practices are influenced by history; the internal goods of a practice may change as the practice evolves in time.
- Practices do not exist in isolation from the communities they serve, but rather are interdependent with the moral norms, ideals, and expectations of those communities.

In summary, from the virtue ethics accounts described so far, a few interesting aspects which are noteworthy in the context of healthcare provision emerge. Firstly, these virtue accounts demonstrate that there is a significant link between deontic and aretaic terms and as such, it is possible to show how virtue concepts translate into action. Secondly and importantly, MacIntyre's approach is significant in the context of healthcare practice in which the internal goods and the ends of a practice, the roles as well as the responsibilities (or role-specific responsibilities) of healthcare practitioners in various practices can be identified. Furthermore, the role-virtues that allow someone to be a good healthcare practitioner can be identified which ensures that healthcare practitioners serve the ends of the practice well.

Lastly, these virtue accounts acknowledge that apart from following a set of rules, healthcare practitioners will also require the development of practical wisdom which comes with experience to deal with ethical dilemmas and work effectively towards attaining the internal goods and ends of healthcare practice.

An understanding of a practice with internal goods, specific ends, and virtues, paves the way for appreciating that virtue ethics makes specific demands within those practices in the form of role-virtues and role-specific responsibilities that arise as a result thereof. In the context of practices with well-established roles, such as those in healthcare practice, virtue ethics is particularly valuable (Annas, 2015). As Annas (2015: 12) puts it:

> Virtues figures in applied ethics in relation to a certain field, such as law, medicine, or engineering. The field in question is already established by certain institutions and the roles that these create within them. This is just the point that if I am a judge, for

> example, I already occupy a role that brings with it certain duties and obligations. It's within this framework that questions can be raised about virtue and vice.

Annas shows how duties and virtues are related to certain well-defined roles within a specific practice. Virtue ethics is particularly valuable within the context of well-established roles, by making firm demands for right action in terms of the virtues (Annas, 2015). For instance, "justice requires me to make a division which is fair; bravery requires that I should stand up for an unpopular position whether or not I want to" (Annas, 2015:11).

In the context of practices with specific roles, such as those established in healthcare, when the practitioners take up a position within a healthcare establishment, it will be important for them to understand that this role comes with specific duties. This is the starting point of ethical deliberations, at which the four principles of biomedical ethics are helpful as they specify that healthcare practitioners have certain duties within that role, for example a duty to benefit their patients, to respect the autonomous choices made by their patients and so on. Otherwise stated, the practitioners have specific role-responsibilities as well as role-virtues that allow them to be good healthcare practitioners. Annas explains the relationship between duties and virtues as follows (2015, 12):

> A doctor who does not bother to diagnose her patients is straightforwardly failing to do her duties and to that extend failing as a doctor. But there is room for distinguishing among doctors who do the basic duties of a doctor; some exercise the virtues of a good doctor while some do not. As is familiar, a doctor can be patient and sympathetic, or impatient and unsympathetic, to a patient's account of his symptoms and general problems. One way of putting this point is to say that virtues of a good doctor are not just virtues at the general level, but virtues as specified within the framework of a given profession.

The attractive features of a teleological approach in the practice of anatomical pathology can be summarised as follows. This type of approach not only provides adequate and concrete recommendation for right or virtuous action but also provides guidance for the development of excellent character apart from excellence in technical skills. Asides from being action guiding, another attractive feature of a teleological account is that the specific ends of the practice in question are clearly established; this further aids in the identification of the virtues required to meet those aims, which in turn enables the development of a virtuous character. In this way a clear account of the ends, unique relationships, virtues and actions is provided and is suitable

to fill in the gaps identified in the principle-based approach, identified in chapter two of this thesis.

It follows that, virtues provide strong recommendations for a plan of action in the context of a practice with well-established ends, which translates to role-specific responsibilities and is particularly valuable within a practice such as anatomical pathology. Thus, a virtue-based approach is helpful in addressing the gaps in the principle-based approach and can be adopted as a suitable theoretical framework in the context of modern anatomical pathology practice. In the remainder of this section, I sketch a possible way in which a virtue-based approach can accommodate the four principles.

4.5 Combining virtues and principles

Having identified a suitable teleological virtue-based approach for the framework that I aim to develop in this thesis, my final undertaking in this section is to determine the link between virtues and principles and to search for the most appropriate means of combining them.

The way I understand virtue ethics, is as a competing normative moral theory that provides an alternative account of right and wrong action, in terms of virtue and vice; otherwise stated, virtues provide a "strong demand" for action by the so-called virtue rules (Annas, 2015: 12; Hursthouse, 1999). This does not however mean, as it is often implied, that virtue ethics does not accommodate principles at all or that the theory denies that healthcare practitioners have specific duties towards their patients and instead rely solely on the healthcare practitioners being virtuous (Annas, 2015). The opposite is in effect true, as shown by Annas that virtue ethics does not reject the idea that we have role-specific duties, that is, a list of duties that come with a particular role (2015). She goes on to say that "the role of virtue in ethics is in no way threatened by the fact that we recognise duties; and the demands of duties, by virtue of the roles that we have" (Annas, 2015: 9). In the context of healthcare practice then, the role of the healthcare practitioner comes with a set of action-guiding rules. The four principles and the more specific rules that emanate from these principles, are best conceived as an attempt to summarise the role-specific duties of healthcare practitioners. Virtue ethics considers these specific rules as starting points that are helpful in ethical deliberations. However, merely performing these role-specific duties is insufficient for acting in a manner that is right or virtuous (Annas, 2015). The healthcare practitioner will also require wisdom and experience to deal with difficult ethical dilemmas, along with the development and exercise of a set of

professional virtues that ensures that healthcare practitioners work effectively towards attaining the ends of healthcare practice.

Thus, a virtue-based approach can accommodate virtues as well as the four principles and the associated role-specific duties that are derived from these.

4.6 Conclusion

My aim in this chapter was to determine whether virtue ethics could be better suited in addressing the human aspects and the role-specific virtues and role-responsibilities that characterise the practice of modern anatomical pathology than the principle-based approach. For this purpose, I began by formulating a broad understanding of the characteristic features of the different forms in which virtue ethics is presented by various authors.

My exploration began with traditional Aristotelian concepts as a foundation for understanding the correlation between human flourishing, practical reasoning, virtues, emotions, and internal motivation. This initial exploration also formed the basis for understanding a teleological virtue approach in which virtues are evaluated in terms of the specific ends that they serve. I have shown that although notions of excellence in character and virtues for the attainment of a fulfilled human life are helpful in providing guidance in ethical assessment in general, they are particularly valuable in more well-defined contexts with well-established roles. These limited contexts are represented by those in the personal spheres and relationships based on trust, such as those found in the relationships between healthcare professionals and their patients. I then described MacIntyre's virtue-based approach inspired by Aristotle's teleological views. In his approach, virtues are related to specific human practices that have internal standards of excellence and specific ends which enable practitioners to meet the goals and standards of excellence designated within the specific practice. Understanding his viewpoint was meaningful in beginning to conceptualise modern anatomical pathology as a human practice with specific standards of excellence that are accepted and pursued by all in the practice.

In addition, I showed how the more modern formulations of virtue-based ethics presented by virtue ethicists Hursthouse and Annas, challenge the dominant criticism levelled against virtue ethics and which attends more deliberately to evaluating right or wrong actions in terms of aretaic concepts and how the virtue-rules place specific demands of action that are valuable in the context of well-established roles.

I established that, apart from providing direction for right action, a teleological account is appealing in that the specific ends of the practice in question are clearly established which aids in the identification of the virtues required to meet those ends. The development and exercise of these ends in turn, enables the development of a virtuous character. In this way a clear account of the ends, roles, relationships, virtues, and virtuous actions is provided in a virtue-based approach and is suitable to fill in the gaps identified in the principle-based approach. I concluded that a teleological virtue ethics can be adopted as a suitable theoretical framework in the context of modern anatomical pathology practice.

Lastly, I searched for the most appropriate manner of combining the strengths of the virtues with that of the principles and showed that a virtue-based approach can accommodate virtues as well as the four principles.

Having established a suitable virtue-based approach to bridge the gaps identified in the principle-based approach, in the next chapter, I explore two teleological virtue perspectives which provide an account of the ends specific to the practice of clinical healthcare and pathology, respectively. The first viewpoint is that of Edmund Pellegrino in which he grounds the ends of clinical healthcare based on the unique interaction with the patient which stems from an internal morality of healthcare. The second is William Stempsey's special report on the virtuous pathologist in which he identifies, similarly to Pellegrino, the ends of pathology, the internal goods and suggests the virtues which leads to the attainment of those ends.

CHAPTER 5: TOWARDS A VIRTUE ETHICS FRAMEWORK FOR MODERN ANATOMICAL PATHOLOGY PRACTICE

5.1 Introduction

Thus far in this thesis, I have identified a virtue-founded conception of morality which provides a suitable theoretical framework for addressing the gaps revealed in current ethical assessment in the context of modern anatomical pathology.

Moving from the general to the particular in this chapter, I focus on two representative teleological virtue approaches that provide a more specific account of the types of ends, internal goods, and virtues specific to clinical healthcare practice (as advanced by Edmund Pellegrino) and pathology practice (as advanced by William Stempsey). An exploration of these practice specific accounts is meaningful in identifying the noteworthy elements which can serve as the building blocks for the framework which I aim to develop in chapter seven of this thesis.

Edmund Pellegrino proposes an internal morality distinctive to clinical healthcare that finds its roots and justification in the unique clinical encounter between the vulnerable patient and the healthcare practitioner. He holds the view that virtue ethics is suitable in the more limited context of healthcare provision; a context in which it is possible to reach consensus regarding the ends that clinical healthcare provision aims to achieve. He places great emphasis on the individual encounter between the healthcare practitioner and the patient, an encounter which is unique and established on the following essential pillars, "the fact of illness, the act of the professions, and the encounter in (especially, clinical) medicine" (Pellegrino, 2008; Garcia, 2017: 226). From Pellegrino's viewpoint, an internal morality of healthcare practice can be determined from the unique aspects of the clinical encounter. On the basis of a teleological virtue ethics account, the internal morality is determined by identifying the ends specific to clinical healthcare, the internal goods inherent in the practice and virtues required to achieve the ends and further the internal goods (Pellegrino, 1995).

Drawing inspiration from Pellegrino's teleological virtue account in clinical healthcare practice and MacIntyre's concept of a practice (which I have previously discussed in section 4.4 of chapter four), Stempsey offers a similar ethical basis for laboratory medicine, focusing on the virtuous pathologist. He characterises pathology as a practice in MacIntyrean terms and identifies the internal goods specific to pathology as well as the ends of pathology practice. Stempsey proposes a list of virtues which he considers that pathologists should develop and

exercise in achieving those ends and promoting the internal goods of the practice (Stempsey, 1989).

My undertakings in this chapter are three-fold. Firstly, I describe the characteristic features of the two teleological virtue accounts and depict the ends, internal goods of the practice and virtues of clinical healthcare and pathology respectively. I note that both accounts are helpful in recognising the centrality of the clinician and pathologist respectively in the ethical decision-making process. What is more, both accounts recognise that technical expertise and principles are not sufficient to provide a full account of healthcare ethics (both in clinical and laboratory medicine). I explore the deficiencies of these accounts and show that both virtue accounts make empirical claims regarding the virtues that are needed to achieve the goals of the practice without adequate empirical justification. Secondly, I show that an appeal to virtue rules, coupled with empirical research can remedy some of the shortcomings identified in these approaches. Lastly, I present the elements of my proposed virtue ethics framework which incorporates some of the noteworthy elements identified in both virtue ethics accounts presented in this chapter, as well as those described previously in chapter four.

To accomplish this task, I begin in section 5.2 with a description of the teleological virtue ethics account that Pellegrino advances specifically for clinical healthcare practice. I show that there are several noteworthy aspects in his virtue account. These include a viewpoint of healthcare practice as a moral enterprise that entails a commitment to well-defined ends, internal goods, and virtues within unique professional roles. In turn, these virtues and professional roles are informed from a covenant with society and from the internal moral aspects of healthcare provision as a human endeavour. I then engage with some of the criticism levelled against his account and show how the action-guiding-capacity of virtue rules that Hursthouse advances can alleviate some the concerns related to his internal morality of healthcare practice.

Next, in section 5.3, I describe Stempsey's virtue ethics account in the narrow context of pathology practice, critique some of its aspects and propose how some of the flaws in his account can be addressed. I argue that although there are several noteworthy elements in his account which are the identification of the ends of pathology practice, the specification of internal goods and virtues; his account presents with a few shortcomings. One of the shortcomings in the virtue ethics approach advanced by Stempsey is in respect to the ends he designates for the practice, which are broad and vague and fail to guide the activities specific of the practice of pathology; this creates a potential for conflict between the ethical

responsibilities of the treating clinicians and the diagnosing pathologists. The second shortcoming relates to the virtues that Stempsey specifies, as important for those in the practice to develop which are not adequately justified and informed by empirical research. I claim that these shortcomings can be overcome by establishing the (current) role of the pathologist and the more immediate ends of pathology practice and the virtues which will serve as benchmarks for achieving those ends.

Lastly, in section 5.4, I present the elements of my proposed virtue ethics framework and show how I incorporate some of the worthy elements of the virtue ethics accounts described earlier in chapter four and in this chapter.

As part of the evaluation of Pellegrino's virtue-ethics account of healthcare practice, I detail in the next section, how in the limited context of healthcare practice, in which a consensus regarding the norms and goods of the practice can be achieved, virtue ethics has a meaningful contribution to make.

5.2 Edmund Pellegrino's virtue-based ethics for the healthcare profession

In this section, I describe Edmund Pellegrino's internal morality of healthcare practice and discuss some of the criticism levelled against his approach. I show how some of the shortcomings associated with his approach could be rectified by the action guidance offered by virtue rules coupled with empirical research.

Pellegrino proposes a virtue ethics approach fundamentally rooted in the essential features specific to the clinical encounter between individual healthcare practitioners and individual patients. For him, the clinical encounter represents:

> The omega point upon which the actions of individual doctors as well as the whole healthcare system converge - that moment when some human being in distress seeks help from a physician within the context of a system of care (Pellegrino, 2001: 560).

He proposes that there is scope for the revival of virtue ethics in the limited context of ethical assessment in healthcare provision. To this end, he argues that:

> Unlike general ethics, professional ethics offers the possibility of some agreement on a *telos* - i.e., an end and a good. In a healing relationship between a health care professional and a patient, most would agree that the primary end must be the good of the patient. The healing relationship, itself, provides a phenomenological grounding for

> professional ethics that applies to all healers by virtue of the kind of activity that healing entails (Pellegrino, 1995: 266).

Pellegrino's internal conception of morality is linked to the oath that the healthcare professional pledges to society. In the paragraph to follow, I explain the concept of a profession and a professional oath as understood by Pellegrino and other authors, in further detail. Pellegrino explains that virtue is historically linked to the healthcare professions dating back to the time of the Hippocratic oath for which virtue provides the foundational basis and the "deontological books of the Hippocratic Corpus" (Pellegrino, 1995: 264). This oath symbolises the entry of the healthcare practitioner into the profession by the public declaration that she accepts the responsibility of being competent in her work and being devoted to the well-being of her patient (Pellegrino, 1995). This public declaration constitutes the covenant between the healthcare practitioner and society "which stands never repudiated" (Garcia, 2017: 227). This oath is more than a promise as unlike a promise it "allows no room for any party to release the oath-taker from her obligation" (Garcia, 2020: 485).

The longstanding traditional roots of ethics, which is found in the virtue of benevolence, provides the common foundation for healthcare practitioners from a variety of backgrounds under the core concepts of benevolence, respect for human life and the vulnerability of the patients (Pellegrino, 1995). Professional ethics refers to the "domain of duties, obligations, and virtues in the health professional's roles as healer and as a participant in a special kind of relationship with a patient" (Pellegrino, 1995: 265). A profession further signifies an occupation governed by specific codes of ethics, characterised by prolonged and specialised training, bound by a vow to society to be competent and knowledgeable; this affords the professional significant levels of autonomy (Swick, 2000). However, recent developments in biomedical sciences are shifting the attention away from traditional concepts of professionalism to more contemporary concerns characterised by a focus on expert knowledge (Swick, 2000). "The rise of this 'expert professionalism' has paralleled the decline in the older sense of 'social-trustee professionalism'" (Swick, 2000: 613). Fortunately, in recent years more traditional notions of professionalism are enjoying increasing attention with the recognition of the special nature of professions such as healthcare, particularly in addressing the needs of the society they serve (Swick, 2000). As mentioned in chapter three, Swick proposes a normative definition of professionalism and asserts that the concept of medical professionalism is reliant on both in the nature of a profession and the type of work performed by healthcare practitioners (Swick, 2000). In view of the importance of characterising the unique responsibilities

associated with healthcare provision, Swick suggests several essential elements or distinct sets of behaviours which frame considerations of the responsibilities associated with professionalism in healthcare practice (Swick, 2000). Some of these sets of expected behaviours, as mentioned earlier in chapter four, are the expectations to:

> Subordinate their own interests to the interest of others; respond to societal needs, and their behaviours reflect a social contract with the community served; demonstrate a continuing commitment to excellence, exercise independent judgement; evince core humanistic values, including honesty and integrity, caring and compassion, altruism and empathy, respect for others, and trustworthiness (Swick, 2000: 614-5).

Professional healthcare practice then entails a commitment to well-defined goals or ends and specific means to achieve these ends, based on the oath that the professional takes (Pellegrino, 1995). Furthermore, Pellegrino considers that professional roles are integral in healthcare provision and the roles and obligations of the healthcare practitioners are derived from the covenant with society and from the internal moral aspects of healthcare practice as a human endeavour (Pellegrino, 1995). Given the special nature and the unique relationships in healthcare practice, Pellegrino proposes that virtue ethics still has a significant role to play in healthcare practice (Pellegrino, 1995). In his approach, he considers that the moral norms, the responsibilities of healthcare practitioners and the values inherent to healthcare practice can be determined by exploring the very nature of healthcare as a practice (Pellegrino, 1995). Pellegrino believes that for virtue ethics to be a viable theory in this context, it needs to define virtue not only in relation to the expected behaviours of virtuous persons but also in terms of the peculiar features of the clinical encounter between the patient and the healthcare practitioner; he writes:

> In a purely virtue-based ethic, the normative standard is the good person, the person upon whom one can rely habitually to be good and to do the good under all circumstances. This standard has been both the strength and the weakness of virtue-based ethics, the reason for its durability, but also for its fragility because of the circularity of its logic. The challenge is to provide a normative force for virtue outside of the circular logic that holds the right and the good to be what the virtuous person takes them to be while defining the virtuous person as the one who is and does what is right and good (1995: 254-5).

From the unique clinical encounter, he is of the view that the ends of healthcare practice, the internal goods of the practice and the virtues needed to attain the end can be established. For Pellegrino, healthcare practice is a moral enterprise taking into account our susceptibility to illness and harm from "nature, environment, happenstance, oneself, other people" we all are bound to each other and reliant on each other for "health maintenance, restoration and improvement" (Pellegrino, 2001: 562). Garcia is of the view that "it is role-virtues, not obligations, that ultimately comprise the ethics of the profession" (Garcia, 2020: 484).

The final feature of a morality that is internal to the practice of healthcare is the clinical encounter in which a relationship develops between the vulnerable patient and the healthcare practitioner "who professes to be a healer" (Pellegrino, 2001: 568). At the centre of this relationship is the trust placed in the clinician, as Pellegrino puts it "based on a vulnerable person voluntarily trusting a physician with their very selves" (Pellegrino, 1995: 267). Based on the unique clinical encounter and healthcare practitioner relationship, he designates the ends that clinical healthcare serves as those "to heal, help, care for, or comfort a sick person" (Pellegrino, 2001: 562). For Pellegrino, "these comprise the good of the patient as the end of medicine" (Pellegrino, 2001: 562). From these well-established ends, certain values and standards of excellence are inferred that are both inherent to, and definitive of the practice (Pellegrino, 2005). What is more, for Pellegrino, a virtue-based approach to healthcare practice must include three essential ingredients given that the practice is epitomised by a healing relationship (Pellegrino, 1995). These ingredients are:

> (1) A theory of medicine to define the telos, the good of medicine as an activity; (2) a definition of virtue in terms of that theory; and (3) a set of virtues entailed by the theory to characterize the 'good' health professional (Pellegrino, 1995: 267).

These ingredients delineate the foundation of Pellegrino's morality internal to medicine. The concept of an internal morality[41] in the context of healthcare with specific ends was initially suggested by Leon Kass in 1985. He claims that "health" should be considered as the end of

[41] The concept that there is an 'internal morality' to certain practices is however not unique to healthcare practice and can be traced back to Lon Fuller in 1969, who discusses this concept in his book entitled *The Morality of Law*. Fuller introduces this influential idea to the practice of law and argues that, in order for law to serve its final goal or purpose (which is that of ensuring "the well-functioning of society"), certain requirements would need to be fulfilled first, amongst others, laws ought to be public, stable, non-contradictory and "should not require the impossible" (Fuller, 1969:46). Subsequently, John Ladd applies the same concept of an "internal morality" to the practice of medicine (Ladd, 1983). Ladd stops short of specifying what the ends of medicine are, but nonetheless believes that determining these professional norms would facilitate the establishment of the ends of medical practice.

medicine, which he described as "the well-working of the organism as a whole" or "an activity of the living body in accordance with its specific excellences" (Kass, 1985:174). Following on the work of Ladd and Kass, Pellegrino places much emphasis on the moral aspects that are internal to clinical healthcare practice and on the importance of the clinician-patient relationship. As one of the various branches of medicine, clinical healthcare practice is defined by Pellegrino as "the use of medical knowledge for healing and helping sick persons here and now, in the individual physician-patient encounter" (Pellegrino, 2001: 563). His work is influenced by the characterisation of a practice put forward by MacIntyre, which, if we recall, is "a coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized" (MacIntyre, 1984: 187). Even though Pellegrino relies on MacIntyre's definition of a practice, he rejects the idea that any external factors, including history and culture should have an influence on the morality of medicine (Pellegrino, 1995). Rather, he claims that medicine has a fixed essence and an invariable end and from this fixed essence, goods internal to the practice of clinical medicine are derived (Pellegrino, 1995). He considers that "medicine exists because being ill and being healed are universal human experiences, not because society has created medicine as a practice" (Pellegrino, 2001: 563). It is these fixed internal norms that in turn, give rise to the unique professional standards which serve to guide the practice of healthcare (Pellegrino, 1995). Much the same as in MacIntyre's virtue ethics approach, Pellegrino brings into focus the idea that the scientific knowledge and practical skills that healthcare practitioners possess, should not be divorced from the ends of the practice of healthcare, but rather be inherently incorporated into those ends (Pellegrino, 1995). He argues that "practices are not to be identified with mere technical skills - medicine *qua* medicine comes into existence when it appropriates knowledge and skills…in order to further its healing purposes" (Pellegrino, 1998: 327).

Furthermore, in the same vein as MacIntyre, Pellegrino believes that both internal goods and external goods can be achieved in healthcare practice. Pellegrino uses the following example to differentiate between goods that are internal to healthcare practice and goods that are external to it "excellence in healing is an internal good of medicine, while making money is an external good" (Pellegrino, 2001: 562). Apart from internal goods, Pellegrino considers virtues to be essential as part of moral and professional life as well as professional conduct in healthcare practice. He states that virtue is:

> The most ancient, durable, and ubiquitous concept in the history of ethical theory. This is so because one cannot completely separate the character of a moral agent from his or

> her acts, the nature of those acts, the circumstances under which they are performed, or their consequences. Virtue theories focus on the agent; on his or her intentions, dispositions, and motives; and on the kind of person the moral agent becomes, wishes to become, or ought to become as a result of his or her habitual disposition to act in certain ways. These phenomena are ineradicable elements of the moral life and any moral theory that ignores them fails to encompass the fullness and complexity of the challenge and struggle to be a good human being (Pellegrino, 1995: 254).

While Pellegrino argues that professional virtues are important in the attainment of the ends of clinical practice, he admits that it is challenging to formulate an exhaustive list of such virtues. In defining a virtue, he relies on Aristotelian elements of virtue and MacIntyrean conceptualisation of professional practice; he defines a professional virtue as "a trait of character that disposes its possessor habitually to excellence of intent and performance with respect to the telos specific to a human activity" (Pellegrino, 1995: 268). He proposes certain virtues as significant in the type of special healing relationships that characterise healthcare practice, while acknowledging that this list is "not meant to be inclusive of all the virtues necessary to healing" (Pellegrino, 1995: 268). Rather, the virtues he proposes are those he considers most significant in achieving the healing ends of the clinical encounter (Pellegrino, 1995). The virtues which he suggests are listed in bulleted form below:

- fidelity to trust (which is intrinsic to all healing professions)
- effacement of self-interest (which is important, given the vulnerability of the patient who is dependent on the healthcare practitioner)
- compassion and caring (which are core aspects of healing professions)
- intellectual honesty (since venturing outside one's field of expertise could be harmful to the patient)
- justice (to ensure that "what is owed to each is rendered to each" within the specific relationship as well as distributive justice) and
- benevolence (to ensure above all the good of the patient) (Pellegrino, 1995: 270).

For Pellegrino, the virtue of benevolence in the caring professions is the "*sine qua non* since the patient obviously seeks to be helped and not harmed" (Pellegrino, 1995: 269). This means that above all "intending every act to be in the patient's interest is the gold standard of medical ethics" (Pellegrino, 1995: 269). He holds that through the exercise of these virtues, the very essence of medical practice is respected and the vulnerability of the patient, protected

(Pellegrino, 1995). He argues, that from these virtues, the following three, could be considered as the overarching virtues capturing the essence and goals of healthcare practice, benevolence, fidelity to trust, and prudence (Pellegrino, 1995). He also makes the point that it is more important to:

> Agree on a notion of the good for humans engaged in a healing relationship and on some list of virtues that are required to achieve the good within a community of healers (the profession) who can sustain that conception of the good (Pellegrino, 1995: 270).

For Pellegrino, the goods towards which clinical healthcare practice is directed are internal and he believes that excellence in clinical medicine is the pursuit of the well-being or the good of the patient (Pellegrino, 1995). This good, for Pellegrino, is further divided by a schema of four different levels of good, which are hierarchical and must be in synchrony. In Pellegrino's schema, the first and lowest ranked level of good, is the medical good (Pellegrino, 2001). This is the level which epitomises medical practice and relies on technical aspects, such as scientific knowledge (often known as evidence-based medicine) and the skills of the healthcare practitioner (Pellegrino, 2001). For the medical good to be translated into good as part of the clinical encounter, it must be in harmony with the next level of good which is the patient's good, as he or she perceives it, in the context of their own beliefs and personal preferences (Pellegrino, 2001). Both the medical good as well as the patient's perception of good must also be in harmony with the next level of good which is the "good for humans as humans" (Pellegrino, 2001: 569). This level relates to the good as conceptualised by Aristotle, which is the good for all mankind in terms of the "preservation of dignity of the human person, respect for his rationality as a creature who is an end in himself and not a mere means, whose value is inherent" (Pellegrino, 2005: 26). Interestingly, Pellegrino considers that it is at this level of good (the good for humans as humans) that the four principles of biomedical ethics are incorporated with the schema he presents (Pellegrino, 2001). However, he expresses his dissatisfaction with the idea that these principles, being rooted in common morality, could change if common morality changes (Pellegrino, 1995).

The final and most significant good, in Pellegrino's schema, is the spiritual good. As part of the clinical encounter, the healthcare practitioner is concerned with his or her patient who is a "spiritual being, i.e., as one who, in his own way, acknowledges some end to life beyond material…this may, or may not, be expressed in religious terms" (Pellegrino, 2005: 27). This level of good "gives ultimate meaning to human lives" and it is this spiritual good "for which

humans will often make the greatest sacrifices of other good things" (Pellegrino, 2005: 27). All other levels of subordinate goods should be adjusted to accommodate for the spiritual good (Pellegrino, 2005).

Pellegrino's conceptual schema is helpful in that the ends and goods of specific practices can be identified at the various levels of good which serve to guide not only clinical medicine, but also other branches of medicine. He writes:

> With proper redefinition of the ends peculiar to each profession, this schema can be used to define the good of the lawyer's client, the teacher's student, and the minister's penitent or parishioner. As with medicine, the ends of these other helping professions are linked to a particular activity specific to each profession (Pellegrino, 2001: 573).

He also suggests that different healthcare practices have ends that are different to those of clinical practice, and the identification of these ends should be pursued to avoid conflicts regarding the ethical responsibilities of the different stakeholders in the healthcare chain of care provision (Pellegrino, 2001). He further acknowledges that, while different practices operate at one or more of the four levels, every healing profession should also focus on the wellbeing of the patient that the profession serves (Pellegrino, 1995).

From such a teleological virtue ethics perspective, the responsibilities of healthcare practitioners and values inherent to healthcare practice can be determined by a morality which is internal to healthcare practice. Such an internal morality is required since healthcare practice is a "normative or value-laden enterprise" (Ben-Moshe, 2019: 4450). Furthermore, from the unique relationships between patients and healthcare practitioners, a certain set of values arise and are agreed upon within a set of standards of excellence inherent to the practice (Ben-Moshe, 2019). In other words, certain values are advocated in healthcare practice and in the clinician-patient relationship. It is thus important to further explore how these values are determined within the practice and the various factors which may influence these values. This is because the "success or failure of the implementation of the internal norms can be assessed insofar as they further (or are at least consistent with) this end" (Ben-Moshe, 2019: 4452). The source of these inherent values to medicine have been identified by means of a teleological virtue ethics standpoint. From such a standpoint, there is a link between the internal morality of healthcare practice and the end that is definitive of the practice (Ben-Moshe, 2019).

Pellegrino makes a few important remarks regarding the establishment of ends specific to those healthcare practices that operate outside the clinical encounter, which are significant to the

virtue ethics framework specific to the context of anatomical pathology that I aim to develop in this thesis. His first remark is that all healthcare practices, whether clinical or non-clinical, "share with medicine a generic set of obligations as healers and helpers in addition to other obligations specific to the nature of their profession" (Pellegrino, 2001: 564). These he designates as the shared *telos* of all healing professions, in other words, the shared obligations of all professions to serve for the good of the patient (Pellegrino, 2001). Significantly however, he does remark that each branch in healthcare aims towards more immediate ends characteristic of the scope of the practice which should be identified (Pellegrino, 2001). Additionally, although some branches outside the clinical encounter may tend to different ends, these nonetheless merge with the ends of clinical healthcare when those ends are used as part of healing or helping the patient (Pellegrino, 2001). For instance, he notes that:

> For basic scientists, the end is the acquisition of fundamental biological knowledge of health and illness. This knowledge becomes a part of clinical medicine specifically when it is applied to the needs of a particular human being here and now. When the knowledge and skills of any other branches of medicine are used in the healing of a particular person, then the ends of that branch fuse with the ends of clinical medicine (Pellegrino, 2001: 564).

These are important remarks which imply that although all the various disciplines ultimately aim at the good of the patient, it is indeed significant to establish the more immediate ends of each practice to understand how those ends fit in and contribute to, the *telos* of healthcare practice.

Another important remark that Pellegrino makes is that once a clear distinction of the good is established within a teleological virtue ethics approach, this good can "provide the moral grounding for the commonly employed 'principles' of biomedical ethics" (Pellegrino, 2001: 576). Within a virtue ethics approach centred on well-being and the good of the patient "autonomy becomes mandatory since to violate autonomy is to violate the dignity and humanity of the person" (Pellegrino, 2001: 576). Beneficence represents the "*primum principium* of all ethics, professional as well as general, since its primary end is doing good and avoiding harm" (Pellegrino, 2001: 576). Lastly, the principle of justice represents a

cardinal[42] virtue which "is tied to the good for humans *qua* humans and is critical to every professional act for individuals and human society" (Pellegrino, 2001: 576). For Pellegrino, role-specific duties and virtues are linked to the well-established ends of healthcare practice.

An important point is the concept of vulnerability, which is central to Pellegrino's internal morality of healthcare and is also applicable to the practice of anatomical pathology, even though it takes place outside the clinical encounter. The vulnerability of the patient in the anatomical pathologist-patient relationship stems from the unfamiliarity of the pathological diagnosis and at times the misconception of the role that the anatomical pathologist plays in their treatment. What I mean is that the interpretation and diagnosis of the disease process is complex and confusing given the intangible and often impenetrable aspects associated with histopathology, which may be difficult to understand by patients; this renders patients vulnerable. Added to this, in some instances, patients may not know who the treating anatomical pathologist is, that is responsible for their diagnosis. Moreover, patients may not even be aware that their diagnosis was established by complex cognitive and interpretive processes of specialist medical practitioners which is subject to inter-observer and intra-observer variations and not automatically established by a machine in a laboratory. Because of this, patients are obliged to place unquestionable trust in the diagnostic competence, as well as the intention of the anatomical pathologist. This in turn, leads to a type of vulnerability for the patient having to place their trust in a healthcare practitioner they have not met, as explained by this quote from one of the research participants in this study:

> *People know who their gynae is, they know who their physician is, but they don't have a clue who their pathologist is, so we're behind the scenes but we are very important (*anonymous quote - study participant).

In consequence, patients are dependent on the anatomical pathologist and vulnerable to exploitation, as Pellegrino says "for personal power, profit, or prestige" (Pellegrino, 2005: 29). From such a viewpoint, it is the character of the anatomical pathologist which protects against possible exploitation, and which thus needs to be afforded considerable attention.

The noteworthy aspects of Pellegrino's virtue based teleological account can now be summarised as follows. Professional roles are integral to healthcare provision and the roles and

[42] Cardinal virtues are those of fortitude, temperance, justice, wisdom, and self-restraint that Plato advances as the essential character traits of a virtuous individual (Pellegrino, 1995). "This list has survived as a list of the cardinal virtues –i.e.., those that might subsume, or be the basis for, the other virtues" (Pellegrino, 1995: 256).

ethical responsibilities of healthcare practitioners are derived internally from the covenant with society and from the internal moral aspects of healthcare provision as a human endeavour. The virtues are defined in terms of the ends of the specific practice. Scientific knowledge and the practical skills of healthcare practitioners are not divorced from the ends of the practice. Within healthcare provision, benevolence is the underlying virtue on which behaviours are evaluated. The exercise of virtues respects the very nature of healthcare practice and protects against the vulnerability of the patients. The ends of the practice, including those practices that function outside the classical clinical encounter, can be determined by the activities particular to the practice. Lastly, given that different practices have ends that are different to those of clinical practice, it is important to identify those ends so as to avoid conflicts regarding the ethical responsibilities of different stakeholders in the chain of healthcare provision.

Despite the noteworthy aspects discussed, Pellegrino's views on morality for clinical healthcare practice have not gone undisputed. In the sub-section below, I engage with some of the criticism levelled against his approach.

5.2.1.1 Criticism levelled against Pellegrino's internal morality for healthcare professions

Several critical comments have been levelled against Pellegrino's views of an internal morality to medicine, some of which I briefly mention here. His approach has been criticised by various authors, most notably Robert Veatch (2001), who holds that an internal morality to medicine does in fact not exist and that all value judgements in ethical dilemmas in medicine need to rely on justified external principles and norms for their resolution. Furthermore, this internal morality is considered too rigid to sustain changes in socio-cultural norms (Brody and Miller, 1998). Pellegrino's internal morality of medicine has also been criticised for placing excessive emphasis on the patient-clinician relationship. In this respect, Nuala Kenny is of the view that this traditional patient-healthcare practitioner relationship is no longer relevant in the type of healthcare provision we encounter today; that of a substantially different model of patient care, often seen as multidisciplinary with various specialties involved and thus Pellegrino's model is dated (Kenny, 2006). Moreover, Pellegrino's model in which the internal morality in healthcare is not compatible with the principle of autonomy is also considered problematic in a healthcare system that places much value on respecting patient autonomy and has firm requirements for informed consent (Kenny, 2006). Pellegrino's end which he considers is definitive of clinical healthcare practice, that of "a right and good healing action for a particular patient" has also been criticised as being too vague and not applicable in all contexts (Ben-

Moshe, 2019; Pellegrino, 2001: 563; Veatch, 2001). This is because the end of clinical practice might vary, depending on the specific role that is played by those within that practice at a specific time (Ben-Moshe, 2019). For instance, a healthcare practitioner may serve the role of clinician, teacher, mentor, administrator, and researcher at times; all roles being equally important relative to the context (Beauchamp and Childress, 2001; Ben-Moshe, 2019; Veatch, 2001). In other words, several ends can be pursued concurrently by a healthcare practitioner (Ben-Moshe, 2019). Indeed, Pellegrino himself is concerned that virtue ethics may overshadow duty and that ethics in healthcare should extend beyond the healthcare practitioner's character development (Pellegrino, 2001). Garcia considers that some of the goods which Pellegrino suggests (such as the spiritual good and the patient's perception of good) are outside the realm of what can be established within the healthcare practitioner patient interaction (Garcia, 2017).

Lastly, similarly to most virtue ethics accounts, Pellegrino's account has been criticised for making "numerous claims about virtues that are not conceptual truths (i.e., they are not derivable from the definition of virtue), but empirical statements" (Spielthenner, 2017: 22).

In the remainder of this section, I show how the concerns raised in respect to the internal morality of healthcare practice can be addressed. The concern that virtue ethics may overshadow duty, is alleviated by an understanding that "the role of virtue in ethics is in no way threatened by the fact that we recognise duties, and the demands of duties, by virtue of the roles that we have" (Annas, 2015: 9). Furthermore, as I have previously shown in chapter four, the concern that virtue ethics is focused on character to the detriment of action is unwarranted. From a virtue ethics viewpoint, character is the primary focus in the ethical decision-making process, but an evaluation of character also extends to an evaluation of duties, consequences, emotions, motivations which together help in the establishment of a virtuous character (Annas, 2015; Hursthouse, 1999). Otherwise stated, virtue ethics accommodates virtues as well as the more specific rules that emerge in the context of specific roles, such as those of healthcare practice.

On the point made by Garcia, regarding some of the goods which Pellegrino suggests (such as the spiritual good and the patient's perception of good), I agree with him that the healthcare practitioner is "restricted in her medical capacity to attending to her patient's medical interest and health needs" (Garcia, 2017: 235). In this way, contrary to what Pellegrino claims, a suitable virtue-ethics approach is limited to physical, mental and emotional functioning, as opposed to the more broadly construed and holistic good that includes the spiritual and the

patient's perception of good (Garcia, 2017). Indeed, a practice such as anatomical pathology, which is not directly involved in the clinical encounter, will function mostly at the level of the medical good and the good for humans. Furthermore, I agree with the criticism that empirical research (particularly in the justification of the virtues which are needed by healthcare practitioners to attain the goals of the practice) should be used coupled with philosophical inquiry in developing a virtue-based account of professional ethics (Spielthenner, 2017).

On a final note, I disagree with Kenny's criticism that Pellegrino's traditional patient-healthcare practitioner relationship is no longer relevant in the type of healthcare provision we encounter today, often seen as multidisciplinary with various specialties involved. In fact, the relationship between the clinician and the patient exemplified in the unique clinical encounter is arguably more important in the context of modern, personalised interdisciplinary medicine. An interesting study, which is relevant to this issue, was done to ascertain the factors that influence the success of multidisciplinary meetings for effective patient management. According to this study "the presence of the treating physician is the most important factor to ensure a correct diagnosis and adherence to the treatment plan" and a recommendation is made that "every patient discussed by an MDT[43] should be presented by a physician who has seen and talked to the patient" (Basta *et al.,* 2016: 2430; 2436). This implies that the clinical encounter represents the unique opportunity to evaluate various medical aspects pertaining to the condition that the patient suffers, to examine the patient, talk to the patient and gain insight not only into the history and presentation of the disease but also the personal circumstances and wishes of each patient. In the absence of that essential personal interaction, important information is lost.

Having discussed the noteworthy aspects of an internal morality of medicine with specific ends, in the section to follow, I critique William Stempsey's characterisation of a virtue ethic specific for pathology practice. I explain how the noteworthy virtue-elements fit in to the virtue ethics framework that I propose in this thesis.

5.3 A critique of William Stempsey's virtue account of pathology practice

William Stempsey, drawing inspiration from Pellegrino's account of a virtuous physician and MacIntyre's conception of a practice, puts forward a special report titled, "The virtuous pathologist. An ethical basis for laboratory medicine" in 1989. In his account, he advances a

[43] MDT refers to a multidisciplinary team.

virtue-based view for understanding pathology as a practice. His approach, largely overlooked by current ethics literature[44], offers an alternative view of pathology practice in contrast to those authors that focus on the four principles in evaluating ethical decision-making in the practice of pathology (Baron, 1993; Rathnayaka, Beneragama and Hewavisenthi, 2016; Serafimov, 2011).

In this section, I describe the main elements of his approach, critique some aspects, and show how an empirical account of the more immediate ends of the practice of pathology and the professional virtues required to achieve those ends can fill in some of the shortcomings in his account. In his virtue account, Stempsey begins with a central question, that is "what sort of person should a pathologist be?" (Stempsey, 1989: 731). He attempts to answer this question by reflecting on teleological virtue ethics, which we have seen has its origins most notably in the philosophy of Aristotle. To answer this question, he considers that the goals of pathology need to be addressed foremost, by addressing the question "what is the good in the practice of pathology?" (Stempsey, 1989: 731). In his approach, he places emphasis on the clinician-pathologist relationship and proposes that this relationship should be considered one of the internal goods in the practice of pathology (Stempsey, 1989). Stempsey takes the view that pathology is a 'practice' in the similar sense defined by MacIntyre, in which practices are excellence-oriented and aimed at specific goods. Internal goods are those that "can only be specified in terms of the particular practice under consideration" and are "identified and recognised by those who actually participate in the practice" (Stempsey, 1989: 732). The opposite applies to external goods, as these goods "are attached to the practice contingently by social circumstances" (Stempsey, 1989: 731). Examples of external goods are "social prestige, substantial financial benefit and high status among other professionals", which can also be achieved in many other professions and so are not "internal to the practice itself" (Stempsey, 1989: 732). Apart from the clinician-pathologist relationship, he further identifies two other internal goods in the practice of pathology; these are technical competence and the pathologist–patient relationship (Stempsey, 1989: 730). He takes an Aristotelian perspective in which he considers that we should evaluate if the technical aspects of the practice "are an adequate

[44] A web-based search, using search engines PubMed and JSTOR reveals a single article on the topic of virtue ethics in the context of pathology practice. This is the article authored by Baron, D.N. in 1993, titled 'Ethical issues and clinical pathology' published in the Journal of Clinical Pathology, 46(5): 385–387. However, in his article he focuses on the application of the four principle and does not explore virtue ethics in significant detail in its application to the practice of pathology.

consideration of what pathology has to contribute to the promotion of human health, which is part of happiness in the Aristotelian sense" (Stempsey, 1989: 735). Stempsey has this to say about the technical skills:

> Characteristic of a practice is that it involves a range of technical skills. This is an evident characteristic of medicine and especially pathology, which focuses so heavily on technical laboratory work. However, a set of skills, even when directed toward some unified goal, does not make a practice. What makes a practice distinctive is the above-mentioned positive feedback loop through which the *telos* is increasingly understood, achieved, and accepted by the members of the practice as the criterion of their activity. The goods and ends that the technical skills of the practice serve are a basis for which the technical skills are developed but are also themselves modified by the exercise of those skills (Stempsey, 1989: 732).

He also links internal goods in pathology to the overall goals or purpose of the practice. These goals are "the good of the patient in terms of restoration of health" and notes that although this might not be easily achievable, nonetheless the "specific activities (in pathology) do contribute to the overall health of patients" (Stempsey, 1989: 735). What is more, he identifies certain virtues he considers to be important for pathologists to develop and exercise to achieve the end of pathology practice. These virtues are "honesty, benevolence, prudence, consistency, sensitivity and courage" (Stempsey, 1989: 738).

Stempsey's virtue ethics account of pathology practice is valuable in identifying and evaluating ethical issues encountered in the practice, from a viewpoint of internal goods, amongst others, in the form of the unique pathologist-clinician relationship. Such an evaluation is significant in understanding that ethical discussions in the practice should be viewed as a continuum between the pathologist and the clinician which ultimately benefits the patient. Unfortunately, this virtue account has largely gone unnoticed by authors writing on the topic of ethics for pathology practice.

Lastly, the account of pathology practice advanced by Stempsey also suggests that, similarly to pathology practice, inasmuch as anatomical pathology relies heavily on laboratory techniques, it in fact, functions within the undefined and blurred lines at the level of clinico-pathological correlation, which places the practice *somewhere* between laboratory medicine and clinical medicine. But that somewhere needs to be clearly established and substantiates further exploration in a teleological virtue ethics approach based on which the ethical

responsibilities of the pathologist can be determined. Stempsey has this to say regarding the identification of the goods internal to the practice:

> It may not be logically necessary to become a pathologist in order to think about the goods internal to that practice. One might be able to do so by hypothetically assuming the perspective of a pathologist. Nonetheless, one who has never practiced pathology is unlikely to be aware of the complexities of the practice and so cannot be in a strong position to specify the goods internal to it (Stempsey, 1989: 732).

There are several essential observations, which are part and parcel of Stempsey's virtue account of pathology practice, which I consider to be pertinent to the ethical assessment in modern anatomical pathology practice and as such, significant building blocks for the virtue ethics framework, which for the sake of clarity I list in bullet form:

- Pathology is a practice characterised by a specific end and specific internal goods.
- The ends and the internal goods in pathology practice are unique to the practice and thus may be different from those of clinical practice.
- The ends and the internal goods of pathology practice ought to be identified by those in the profession or at least by those familiar with the profession.
- The internal goods and the end of pathology practice can be accomplished through the development and the exercise of certain virtues, specific to the practice.
- Virtues required in the practice of pathology are different from those virtues required in clinical practice since the goals of the practice are different (Stempsey, 1989).

These observations are important for two reasons. Firstly, the foundation that Stempsey suggests for ethical reflection in the practice of pathology provides the model for the development of my virtue ethics framework in this thesis. Secondly, the incorporation of such a framework that systematically identifies the goals, internal goods, and virtues in modern anatomical pathology practice, allows for an evaluation of the role-specific duties that are characteristic to the practice. This is important since these relationships, as previously discussed in chapter three of this thesis, are of great significance but have been underemphasised and at times, misinterpreted in the context of the application of the principle-based approach to pathology practice. In short, these points represent the building blocks for the development of my virtue ethics framework, specific to modern anatomical pathology practice, which relates virtue ethics to principle-based ethics.

Nevertheless, there are a couple of limitations in the virtue ethics account that Stempsey proposes which I briefly discuss in the section below.

5.3.1 The shortcomings with the virtues and the ends of pathology characterised by Stempsey

There are several shortcomings attributed to Stempsey's virtue ethics approach to pathology practice. Firstly, the ends that he designates for the practice of pathology which he considers are the same as the end of healthcare practice namely "the good of the patient in terms of restoration of health" (Stempsey, 1989: 735). He notes that although this might not be easily achievable, nonetheless the "specific activities (in pathology) do contribute to the overall health of patients" (Stempsey, 1989: 735). While I agree that each healthcare practice ultimately aims at health and that certain diagnostic activities certainly do contribute significantly to the overall health of the patient, establishing such broad ends to the practice of pathology without mentioning the more intermediate ends that the practice routinely serves is problematic. The problem with specifying such a broad end for the practice in the context of a teleological virtue approach is that it is too vague to guide the activities within the scope of the practice and it obscures the identification of the virtues that are specific to the routine activities in the practice. Furthermore, designating such a broad end as the overall restoration of the health of the patient has the potential to cause conflict between the pathologist and the clinician, comparable to the conflicts attributed to the principle-based approach (discussed previously in chapter three). This view is similarly shared by Pellegrino who considers that the difficulty in designating broad ends to all the various practices is that "it places ends in conflict with each other and weakens any attempt to establish a hierarchy of goods among the many ends "medicine" may serve" (Pellegrino, 2005: 23). As Spielthenner puts it, "it is this end which gives content to professional virtues and on the basis of which they will be justified" (Spielthenner, 2017: 16). This is not to say that pathology practice does not ultimately aim at the health of the patient as all branches of healthcare undoubtably do, but rather that more immediate ends specific to the practice should be established to enable the identification of the role-duties and role-virtues required for *this* practice. Furthermore, if we recall from the previous section, Pellegrino is of the view that different healthcare practices may have ends that are different to those of clinical practice and that the identification of these ends should be pursued to avoid conflicts in respect to the ethical responsibilities of the different stakeholders in the healthcare chain of care provision (Pellegrino, 1995). Stempsey concedes that it is probable that "different segments of the practice will tend to see their end to be slightly different" (Stempsey, 1989: 734). He also

states that "although the *telos*, or ultimate end of the practice, may remain relatively clear and constant, development of the practice is likely to continually refine its intermediate goals" (Stempsey, 1989: 732). However, he does not explore this further and does not suggest what these more immediate ends are.

In my view, although the practice of modern anatomical pathology, like all other healthcare branches, has the common goal of the good of the patient in terms of health restoration, the more specific and immediate end is arguably in the form of contributing through a correct and timely diagnosis. This diagnosis in turn, provides a platform for the treating clinician from which a patient can be treated, as effectively and efficiently as science and modern healthcare practice can provide. Furthermore, the immediate end that anatomical pathology aims to achieve is conceivably different from those of clinical medicine which the practice supports through diagnostic knowledge and skill. The immediate end only becomes part of clinical practice when it is incorporated with the clinical diagnosis to be used in the treatment of the patient, as suggested by Pellegrino. To this end, I propose that these more immediate aims or ends of the practice should be identified with the intention of distinguishing the role responsibilities of the various branches of healthcare, given that different healthcare practices may aim towards slightly different immediate ends. If the immediate ends of the practice are not clearly identified, the virtues and activities within the practice are likely to be misdirected and not relevant to the (current) ends of pathology practice and a virtue ethics approach cannot provide a defensible account of the ends, virtues, and internal goods of the practice.

The second shortcoming in Stempsey's account is in respect to the virtues that he designates as important in the practice. He selects a few virtues, namely honesty, benevolence, prudence, consistency, sensitivity, and courage, the development and exercise of which he considers important in achieving the end of the practice which he designates as the good of the patient in terms of restoring health (Stempsey, 1989). In a teleological virtue ethics account, establishing which character traits are virtues is achieved by determining that the trait is required to achieve the ends of the practice. Bearing in mind that for Stempsey the end of the practice of pathology is the same as the end of clinical healthcare practice, presumably the virtues required would also be the same. While there is some overlap in the virtues that Stempsey advocates for the practice of pathology with those that Pellegrino advocates for clinical healthcare provision, there are a couple of notable differences. However, in Stempsey's account, it is not clear why the virtues for pathology are different than those for clinical healthcare practice. Further to this, knowing that specific ends of a practice require the pathologist to develop and exercise (say,

for example, the virtue of consistency in order to serve the practice of pathology well) is also an empirical matter. For a teleological framework to provide adequate answers to why some character traits are virtues in the practice, a clear approach to justify these, is needed (Spielthenner, 2017). There seems to be an overlap between conceptual matters and empirical matters in Stempsey's virtue approach. What I mean by this, is that he arbitrarily assigns several virtues (as the saying goes - from the armchair) that he believes are important in advancing the goals of pathology in accordance with traditional teleological accounts without much justification of why those specific virtues would serve the practice of pathology adequately. For example, one of the virtues he proposes is sensitivity. But knowing whether the end of pathology requires pathologists to be sensitive is in fact an empirical matter. In his article it seems, the list of alleged virtues only reflects his opinion taken from traditional virtue ethics. Spielthenner has this to say regarding the link between conceptual and empirical matters in determining the virtues needed in a practice:

> That virtues are needed to serve the end of a profession is true by definition. There is no need for empirical research to confirm this. But the definition does not allow us to determine whether a certain trait is a virtue. For example, if we want to know whether meticulousness is a virtue of musicians, we first need to clarify the concept meticulousness and then find out whether this trait is needed to serve the musical profession well…a satisfying answer to the question whether a trait is a virtue requires a combination of the conceptual and the empirical (Spielthenner, 2017: 20).

Given that the characteristic features of pathology practice might not be as apparent as the better understood clinical disciplines, this observation implies that determining the current ends of the practice and by extension, the virtues and the role of the pathologist in the healthcare team is best achieved by exploring, analysing, and incorporating, at least in part, the views, and opinions of those in the practice. Indeed, an empirical account would be better suited to evaluate which traits are virtues suitable for a specific profession (Spielthenner, 2017).

Thus far, in this section I explored the benefits and shortcomings of Stempsey's virtue account of pathology practice and showed that for such a framework to be meaningfully applied to the nuances and complexities of modern anatomical pathology practice, it must be empirically informed by the experience and opinions of those in the practice. In this last section of this chapter, I present the initial perspective of the virtue ethics framework which I propose in this thesis.

5.4 The elements of the proposed virtue ethics framework – initial perspectives

In this remaining section of this chapter, I present some initial perspectives regarding the elements of my proposed virtue ethics account drawing on the noteworthy virtue elements of the approaches discussed so far. These elements represent an important foundation upon which I consolidate the empirical findings and construct the proposed virtue ethics framework in subsequent chapters of this thesis. The kind of ethical framework that I propose is teleological or end-directed in that it relates the professional virtues of the practice of anatomical pathology to the attainment of the immediate and ultimate ends of the practice and the internal goods of the practice. The four principles of biomedical ethics are incorporated within the proposed framework as helpful starting points in ethical deliberations.

5.4.1 Theoretical component

The theoretical component of my framework is based on a teleological virtue ethics view of morality and MacIntyre's virtue-based conception of a practice. Within this virtue-based conception of morality, virtues provide adequate demand for right action by means of virtue-rules and these virtues are established in light of the immediate ends of anatomical pathology practice which further the *telos* of healthcare practice. Motivations are incorporated in the framework which entails that a well-motivated anatomical pathologist is concerned with the well-being of the patient which is achieved by means of an effective relationship with the patient's primary healthcare provider- the clinician.

In the proposed framework, I also rely on MacIntyre's elements of a practice. I separated the various noteworthy elements into three distinct groups which I discuss individually as follows:

i. any coherent and complex form of socially established co-operative human activity
ii. through which goods internal to that form of activity are realised in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity
iii. with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended (MacIntyre, 1984: 187).

In respect to point (i) anatomical pathology corresponds well with the concept of a practice that is socially established and aimed at providing a beneficial pathological diagnosis for the further management of the patient that requires medical treatment. The practice of anatomical

pathology is also guided by a set of specified rules and norms, particularly in respect to the technical norms and the use of the well-establish classification of diseases. In the pathological diagnosis process, "these norms apply to specifying and justifying rules that guide the diagnosis of the pathologists as well as social norms and ethical norms in dealing with patients and colleagues" (Pena and Andrade-Filho, 2009: 129). Within the practice of anatomical pathology, there are also a subset of specific fields which can be broken down into diagnostics (including prognostics), research, teaching and training, and a combination thereof. Lastly, anatomical pathologists represent the practitioners, as characterised by MacIntyre.

Regarding point (ii), the goods internal to the practice of anatomical pathology in my framework are represented on a similar note to those suggested by Stempsey as the *anatomical pathologist-clinician-patient relationship* and the *excellence in diagnostic skills* (Stempsey, 1989). These internal goods reflect the core values in anatomical pathology, the achievement of which furthers the ends of the practice (Stempsey, 1989). Excellence in diagnostic skill is inherent to the practice and a prerequisite in furthering the ends of the practice. Apart from excellence in diagnostic skills, the collaboration in the anatomical pathologist-clinician-patient relationship, most notably between the anatomical pathologist and the clinician, is essential if the knowledge of the disease process which results from the diagnostic skill is to be beneficial to the individual patient, but also for the community which includes other pathologists and clinicians, present and future, as well as future patients (Stempsey, 1989).

Lastly, in respect to point (iii), the empirical component of my framework informs the immediate ends of the practice of anatomical pathology and the virtues which help serve to further those ends. In the kind of teleological virtue ethics framework that I propose, the *telos* of the practice of anatomical pathology is the good of the patient which is a shared good in all the various branches of healthcare, as Pellegrino advocates. I go deeper than Stempsey in that I also characterise the more immediate ends of the practice of anatomical pathology, informed by the empirical component in this thesis (which is the topic of chapter six). It is these immediate ends that provide justification for the professional virtues of the practice. On the account presented in the virtue ethics framework which I propose, the claim that specific ends are characteristic of the practice of anatomical pathology and further that a character trait should be considered a virtue, is justified by finding out that it is needed for achieving the (current) goals of the practice, evidenced by the empirical component. That is to say the empirical component sheds light on the current goals of anatomical pathology within the healthcare team. In this way, the empirical component informs the normative discussion

regarding the current goals of modern anatomical pathology practice and provides an initial perspective about the types of character traits which are valuable for the practice. Investigating the opinions and experiences of those in the practice regarding the ultimate goals and the type of character traits that they believe will assist in achieving those goals, is not to neglect the normative component. Rather it is to inform the normative component by the real-life experiences and opinions of those currently in practice. In the field of virtue ethics, this is particularly relevant as one of the pillars of this theory is a focus on particular contexts (Shea, 2020; Spielthenner, 2017). A second important reason to incorporate empirical studies in the development of an ethics framework that is specific for modern anatomical pathology is not simply to identify the relevant goals and virtues, but also to promote its development and exercise in those specialising in the field of pathology. Lastly, my aim in respect to the identification of professional virtues is not to designate an exhaustive list of virtues for modern anatomical pathology, but rather to ascertain which category of virtues is characteristic of the practice and will serve as benchmarks for best serving the immediate ends of the practice.

In summary, on the account that I propose, the virtue ethics framework is empirically informed by those with expertise and experience in the realities and particularities involved in the practice. The immediate ends of the practice of modern anatomical pathology are empirically informed and the justification that certain character traits are virtues are similarly empirically informed so that they are relevant to the current scope of practice. In the proposed framework the development of the virtues is "an ongoing process of learning" (Annas, 2015: 7). "The virtue rules are the means by which we learn to be virtuous" (Annas, 2015: 7).

Having explained the theoretical component of the proposed virtue ethics framework, in the remainder of this section I sketch the aims of the framework before providing a summary of the noteworthy concepts that I incorporate in the framework and the advantages related to these noteworthy concepts.

5.4.2 Aims of the virtue ethics framework

5.4.1.1 Philosophical aim

In this framework, I aim to establish the immediate ends of the practice of modern anatomical pathology. Considering these ends, the role and responsibilities of anatomical pathologists can be clarified together with the virtues that allow someone to be a good anatomical pathologist. In the proposed virtue ethics framework virtues take centre stage, and the principles of right action can be derived from the virtues.

5.4.1.2 Practical aim

Another aim of the framework is to provide a roadmap for ethical decision making in modern anatomical pathology practice and motivate the development of excellence in character traits in those involved in the practice as well as in the training of anatomical pathologists.

Following on Pellegrino's virtue ethics schema, the proposed framework is built on the following pillars:

> (1) a theory of medicine to define the telos, the good of medicine as an activity; (2) a definition of virtue in terms of that theory; and (3) a set of virtues entailed by the theory to characterise the 'good' health professional (Pellegrino, 1995: 266-7).

Within the teleological virtue ethics framework that I propose in this thesis, I define a professional virtue as a character trait, the possessing and exercise of which makes the anatomical pathologist good in her role and relationship with the clinician and patient(s) and which is required (at least to a minimal extent) to best serve the immediate ends and *telos* of the practice. In this regard, I hold a similar view to Spielthenner, who considers that a virtue is a matter of degree and that a character trait can be considered a professional virtue even if only expressed to a minimal extent (2017).

Further to this, within the proposed teleological virtue ethics framework, I define a good practitioner as one who is virtuous within his or her role and serves the immediate ends and *telos* of the practice adequately. Conversely, I define a bad practitioner as one who is vicious in his or her role and does not serve the immediate ends and *telos* of the practice adequately.

5.4.1.3 Empirical aim

In a similar manner to Stempsey's account, I include an exploration of the internal goods, goals, and virtues in modern anatomical pathology practice as part of the development of the virtue ethics framework. Nonetheless, the methodology used in my exploration differs from Stempsey's purely normative account. I make use of an empirical approach which is informed by the opinions of those in the practice. This is coupled with a normative analysis within a virtue ethics theoretical background to identify and determine the distinct role of the modern anatomical pathologist, the immediate ends of the practice and the professional virtues that serve the ends of the practice.

In summary, the proposed virtue ethics framework for anatomical pathology practice is composed of the following fundamental concepts:

- Anatomical pathology is a practice in the McIntyrean sense, characterised by specific roles and relationships and immediate ends unique to the activities internal to the practice and with a *telos* common to all healthcare professions.
- The internal goods which are inherent to the practice of anatomical pathology are designated as *collaboration in the anatomical pathologist-clinician-patient relationship* and *excellence in diagnostic skills*.
- The immediate ends of the practice and the professional virtues which are required to further the internal goods of the practice and achieve the immediate ends of the practice are informed by empirical research.
- Professional virtue is defined as a character trait, the possessing and exercise of which makes the anatomical pathologist good in her role and relationship with the clinician and patient(s) and which is required (at least to a minimal extent) to best serve the immediate ends and *telos* of the practice.

5.5 Conclusion

My undertaking in this chapter was to explore existing virtue ethics accounts specifically aimed at clinical healthcare provision and pathology as a way to conceptualise the building blocks of my proposed virtue ethics framework for modern anatomical pathology. I began with an exploration of Pellegrino's virtue ethics approach which is fundamentally rooted in the essential features specific to the clinical encounter between individual healthcare practitioners and individual patients. I showed that Pellegrino holds the view that virtue ethics is suitable in the more limited context of healthcare provision; a context in which it is possible to reach consensus regarding the ends that clinical healthcare provision aims to achieve. From Pellegrino's viewpoint, an internal morality of medicine can be determined from the unique aspects of the clinical encounter on the basis of a teleological virtue ethics account (1995). This is achieved by identifying the ends specific to clinical healthcare, the internal goods inherent in the practice and virtues required to achieve the ends and further the internal goods (Pellegrino, 1995). I have also shown that Pellegrino suggests that different healthcare practices have ends that are distinct to those of clinical practice. The identification of these ends should be pursued to avoid conflicts regarding the ethical responsibilities of the different stakeholders in the healthcare chain of care provision (Pellegrino, 1995). Importantly, in the context of an internal morality of medicine, professional roles are integral to healthcare provision and the roles and ethical responsibilities of healthcare practitioners are derived internally from the covenant with society and from the internal moral aspects of healthcare provision as a human

endeavour. Within such an approach, scientific knowledge, and practical skills that healthcare practitioners develop and possess are not divorced from the ends of the practice. Within healthcare provision, benevolence is the most significant virtue, and the exercise of virtues respects the very nature of healthcare practice and protects the vulnerability of the patients. The ends of the practice, including those practices that function outside the classical clinical encounter, can be determined by the activities particular to the practice. Furthermore, given that different practices have ends that are different to those of clinical practice, it is important to identify those ends to avoid conflicts regarding the ethical responsibilities of different stakeholders in the chain of healthcare provision. I then discussed some of the concerns associated with Pellegrino's virtue account and showed how these can be alleviated by an appeal to the action-guiding-capacity of virtue rules as designated by virtue ethicist Hursthouse.

Thereafter, I described Stempsey's account of the virtuous pathologist and noted the significant aspects of his account as follows. Pathology is a practice characterised by a specific end and particular internal goods. The ends and the internal goods in pathology practice are unique to the practice and thus may be different from those of clinical practice. Furthermore, the end and the internal goods of pathology practice ought to be identified by those in the profession or at least by those familiar with the profession. The internal goods and the ends of pathology practice can be accomplished through the development and the exercise of certain virtues, specific to the practice. Professional virtues required in the practice of pathology are different from those required in clinical practice since the goals of the practice are different. I also critiqued the lack of identification of the more immediate ends specific of the practice and the lack of an empirical foundation in determining the ends and professional virtues of pathology in Stempsey's account.

On the backdrop of these accounts, I presented some initial concepts of the building blocks in my own virtue ethics framework. The elements of my proposed virtue ethics framework can be summarised as follows. Within the virtue ethics framework for modern anatomical pathology, ethical activity in anatomical pathology practice is acknowledged as a human endeavour and is afforded a more human dimension. Professional practice is understood and evaluated as a human activity comprising of various cognitive and communicative activities which focus both on technical skills and technical excellence, as well as on personal excellence in the development of character traits and internal motivations which aid in the attainment of the goals of the practice. On a virtue-based conception of morality, the practice of modern anatomical pathology is viewed in terms of specific roles, unique relationships, and well-

established immediate ends. Within the practice, what counts as right action is determined within the role and relationship with the clinician and the patient respectively, in attaining the ends of the practice and by how those ends are related to the unique human activities. Furthermore, the framework that I propose allows for the incorporation of empirical studies in the discovery of the ends and virtues as well as the role of the anatomical pathologist within the healthcare team which are determined within the practice. This allows for an exploration of the opinions and experiences of those in the practice. I also showed how the proposed virtue ethics framework accommodates the principles of biomedical ethics in the MacIntyrean conception of a practice guided by a set of specified ethical rules and norms, in this type of indirect form of patient care. Lastly, I discussed the practical implication of the resultant framework that encourages the development of virtuous character and virtues behaviour in modern anatomical pathology practice.

Having identified the various noteworthy virtue elements and presented them as initial concepts in my proposed virtue ethics framework, the next chapter is concerned with the empirical component of the virtue ethics framework for modern anatomical pathology practice.

CHAPTER 6: THE EMPIRICAL COMPONENT OF THE VIRTUE ETHICS FRAMEWORK FOR MODERN ANATOMICAL PATHOLOGY

6.1 Introduction

Thus far in this thesis, I have identified the theoretical component of my framework which is based on a teleological virtue ethics conception of morality and MacIntyre's virtue-based conception of a practice. In this view of morality, the practice of modern anatomical pathology is viewed in terms of a specific role and relationships with well-established ends. What counts as right action is determined within the role and relationships with the clinician and the patient respectively, in serving the ends of the practice and are connected to the unique human activities in the practice.

Nonetheless, if we recall, in chapter two, unlike other medical specialties that have clearly established ends and well-defined roles within the chain of healthcare provision, anatomical pathology practice takes place within the blurred lines between laboratory medicine and clinical patient care at the level of the clinico-pathological interphase. Complicating matters further, the nature of the involvement of the anatomical pathologist has conceivably changed over the years since Stempsey's initial characterisation in 1989. Furthermore, as shown in chapter five, there is a need to characterise the immediate ends of the practice, given that the end of pathology put forward in Stempsey's virtue approach is so broad that it creates potential for conflict between the ethical responsibilities of the pathologist and the treating clinician respectively. Characterising the immediate ends of the practice in turn, facilitates the identification of the virtues that anatomical pathologists should develop and exercise to achieve the immediate ends. These immediate ends should be specific enough to guide the activities inherent in anatomical pathology within the teleological virtue ethics framework, while being in synchrony with the ends of clinical healthcare practice and in this way, promote the well-being of the patient, at which all healthcare disciplines are ultimately aimed. As I have shown in the previous chapter, empirical research, coupled with philosophical injury, provides adequate justification for the development of a teleological virtue ethics account that is relevant to the current ends of the practice.

Against this background, my aim in this chapter is to provide an in-depth representation of the empirical findings which offers insight into the routine practice of anatomical pathology, the developments in the practice and the challenges faced in modern diagnostic service provision

which are not apparent in current literature. More specifically, my aim is to present the various noteworthy themes that emerged from the empirical component of the study. These themes relate to the views of those in the practice regarding the current role of the anatomical pathologist in the healthcare team, the goals that anatomical pathology aims to achieve and the character traits which an ideal anatomical pathologist should develop and display. The empirical component forms an important foundation for the development of the virtue ethics framework, as ethics literature vis-à-vis current practices, opinions and challenges in anatomical pathology is currently lacking.

This chapter is structured as follows. I begin in section 6.2, with an in-depth description of the methodology used in the empirical component of the thesis. By methodology, I refer to "the process or design lying behind the choice and use of particular methods and linking the choice and use of particular methods to the desired outcomes" (Crotty, 1998: 3). Then, in subsection 6.2.1, I describe the objectives of the qualitative research followed by the rationale for selecting a qualitative design in subsection 6.2.2. I show how the qualitative design enables the incorporation of the beliefs, opinions, and experiences of anatomical pathologists in the development of the virtues-based framework. This serves to inform the virtue-based framework that is relevant to the current scope of the practice and is cognisant of the developments in modern medicine and modern pathology as a multidisciplinary, personalised, biological approach to disease entities. In subsection 6.2.3, I describe the research design used in the study, including the population and sampling in subsection 6.2.4. This is followed by a description of the approach used in subsection 6.2.5, including the tools used during the interviews. Subsection 6.2.6 is concerned with the data collection and analysis, including the list of themes which emerged from the empirical data. Then, in subsection 6.2.7, I explain how trustworthiness is ensured in the study followed by the ethical consideration in subsection 6.2.8. Subsection 6.2.8 concludes with a discussion of the limitations of the empirical component of the study.

I then move on to present the empirical findings of the study related to the objectives of the empirical component in section 6.3. In this section, I present the findings related to the role of the anatomical pathologists within the healthcare team, the goals of the practice which are important in informing the immediate ends of the practice.

The findings in the study related to the particularities of the relationship between the anatomical pathologist and the clinician brings to light that this relationship is central and internal to the

practice of modern anatomical pathology. This is because it is largely through the treating clinician that the anatomical pathologist contributes to the well-being of the patient. In other words, an effective relationship between the clinician and the anatomical pathologist furthers the ends of the practice. The analysis of the findings indicates that the goals of the practice of modern anatomical pathology are viewed by those in the practice as serving through the pathological diagnostic report (which constitutes the diagnosis) in guiding the treating clinician in the further management of the patient. In this way, modern anatomical pathology practice contributes to the overall well-being of the individual patient. The next task in the latter part of section 6.3 of this chapter, is the identification of the professional virtues in subsection 6.3.3, which the participants in this study consider an ideal anatomical pathologist would need to develop and exercise in order to serve the ends of the practice adequately. At this juncture, it is important to mention that my intention with this objective of the empirical component is not to identify an exclusive or exhaustive list of virtues for modern anatomical pathology practice. Rather, my aim is to concretise the professional virtues that are valuable to the practice of modern anatomical pathology and are relevant in furthering the internal goods and immediate ends identified for the practice.

A noteworthy aspect arising from the empirical data of this study which is not reflected in the ethics literature is that the main virtue categories which have emerged strongly from the empirical component are those of *wisdom and knowledge*, followed by *courage* and *justice*. If we compare the virtues identified by the empirical component of this study with those that Stempsey proposes (which are honesty, benevolence, prudence, consistency, sensitivity, and courage) we can observe the character traits which characterise the broad virtue of wisdom and knowledge do not feature as vigorously in Stempsey's list of virtues. Conversely, some of the virtues that he proposes under the category of humanity, for example, the virtue of sensitivity, contrast with the empirical findings in this thesis in which virtues of humanities do not feature as essential in the practice.

In the final part of section 6.3, I describe the ethical issues that the participants in this study reveal in respect to the use of emerging molecular techniques, including biomarkers for diagnostic use. The ethical issues related by the participants in this study can be summarised as issues of complexity, uncertainty, unavailability, and costs of biomarkers.

I begin, in the section below, with a detailed portrayal of the methodology used in the empirical component of this thesis.

6.2 Research methodology

6.2.1 Qualitative research objectives

As previously discussed in chapter five, on the account presented in the virtue ethics framework which I propose, the claim that specific ends are characteristic of the practice of anatomical pathology and further that a trait as a virtue is justified by the empirical component. In other words, the empirical component sheds light on the current goals of anatomical pathology in the healthcare team. Furthermore, uncovering which character traits are required for serving the (current) goals of the practice, is similarly evidenced by the empirical component. In this way, the empirical component informs the normative discussion regarding the current goals of modern anatomical pathology practice and provides an initial perspective on the types of character traits which are important for this practice. Investigating the opinions and experiences of those in the practice regarding the ultimate goals and the type of character traits that they believe will assist in achieving those goals is not to discount the theoretical component but rather it is to maintain that the theoretical component can be informed by the factual experiences and opinions of those currently in practice (Spielthenner, 2017). In the field of virtue ethics, this is explicitly relevant considering that one of the pillars of virtue theory is on the particularity of contexts or on the importance of the features of each particular case (Shea, 2020; Spielthenner, 2017). In sum, the objective of the empirical component is to gather insight into the practice of anatomical pathology as a way of informing the virtue ethics framework that is relevant to the current scope of practice. To this end, the following objectives form part of the empirical research component in this thesis:

I. To explore how anatomical pathologists understand and view their role within the healthcare team and how they view the ultimate goal of their practice as a way of informing the immediate ends of the practice.
II. To explore the significance of the anatomical pathologist-clinician relationship within the context of anatomical pathology practice.
III. To explore the views of anatomical pathologists regarding the characteristic traits of the ‘ideal anatomical pathologist’ to illustrate which types of traits anatomical pathologists find important as a way of advancing the immediate ends of the practice.
IV. To identify any moral and ethical issues that may have resulted from the introduction of newly emerging molecular and genetic techniques, including biomarkers, to the routine practice of anatomical pathology.

6.2.2 Rationale for selecting qualitative research methods

My aim in respect to the empirical component of this thesis is to gather insight into the practice of anatomical pathology, as a way of informing the virtues ethics framework that is relevant to the current scope of practice. To the best of my knowledge, there are currently no empirical studies that explore how anatomical pathologists understand and view their role within the healthcare team, how they conceive the ends of the practice and the virtues needed in attaining those ends or the current challenges encountered in the provision of diagnostic services in anatomical pathology practice.

The empirical objectives in this thesis could be addressed either by quantitative methods or by qualitative methods. However, a quantitative survey would not provide the insight necessary for understanding the various complexities and nuances of anatomical pathology practice. These nuances include aspects pertaining to the relationship between the anatomical pathologist and the clinician and the identification of the current roles and immediate ends of anatomical pathology, as well as the virtues that are required to achieve those ends; aspects which are not adequately portrayed in the literature. Since the empirical component of this thesis seeks to explore those characteristics, I deemed it more appropriate to employ a research method that would allow anatomical pathologists to express their views and experiences in the form of individual interaction with the researcher thereby capturing the richness of the experience of anatomical pathologists in their routine practice. The individual interviews in this way offer a better understanding of the unique relationships involved in the practice and a deeper understanding of how anatomical pathologists view their role within the chain of healthcare provision and other aspects of the practice which may not be adequately represented in ethics literature.

I have thus chosen a qualitative research design. The qualitative research design represents an essential component in informing the development of the virtue-based framework based on the knowledge and understanding of the views and experiences of anatomical pathologists as stakeholders in the healthcare team. As Salloch, Vollmann and Schildmann (2014: 4) suggest, "explorative empirical research is expected to bring new information which is relevant for an ethical evaluation and may have slipped the attention of the "armchair philosopher" so far".

Furthermore, in contrast to quantitative methods, qualitative methods are better equipped in providing a deeper comprehension of the real-life experiences and personal views related to ethical issues in the context of healthcare provision (Taylor, Hull and Kass, 2010). Indeed, in

line with the benefits of empirical research in bioethics outlined by these authors, the data from the interviews in this thesis revealed several beliefs, opinions, complexities, and issues which are not evident in the literature as they are part and parcel of the practice and are unfamiliar to those outside of the practice.

6.2.3 Research Design

The research design used in this study is a qualitative design using semi-structured, face-to-face interviews, coupled with the normative analysis of empirical data. In the normative analysis, I employ a teleological virtue-founded approach as the theoretical framework and MacIntyre's concept of a practice. I critically analyse relevant texts and themes that emerge from the individual interviews; this analysis consists of defining, contextualising, and clarifying concepts relevant to the characterisation of the immediate ends in the practice of anatomical pathology and the professional virtues that will support these ends. I then analyse the identified themes against a virtue theoretical framework that informs the development of the virtue-based framework for modern anatomical pathology. Against the backdrop of a teleological virtue-founded approach, I identify and contextualise the immediate ends of modern anatomical pathology practice, the role of anatomical pathology practice in the healthcare team and the types of virtues that lead to the attainment of those immediate ends.

6.2.4 Population and Sampling

6.2.1.1 Population

The target population represents specialists in the field of anatomical pathology, willing to participate in the study and willing to sign consent, with two years or more experience in the field. I chose to only include participants with two or more years of experience as those with less than two years may not have been sufficiently exposed to the various nuances of the practice, including their relationship with the clinical colleagues. In other words, those with limited experience in the field may not have been exposed to the various facets of the pathological diagnosis process, including the use of modern ancillary laboratory techniques and the various relationships characteristic of the practice.

6.2.1.2 Sampling and sample size

Sampling is defined as a "process of selecting or searching for situations, context and/or participants who provide rich data of the phenomenon of interest" (Moser and Korstjens, 2018:

10). The sampling strategy that I made use of was purposive[45] of specialist anatomical pathologists in South Africa, currently practicing in the field of anatomical pathology. I also made use of the snowball sampling strategy in those cases in which the participants interviewed made referrals and recommendations to colleagues whom they believed could be potential participants in the study.

The sample size was guided by the so-called principle of saturation introduced by Glasser and Strauss (1967), symbolising the moment in which the information emerging from the interviews becomes repetitive. An estimated sample of twenty participants was initially anticipated to achieve data saturation. The point of data saturation in the interviews in this study was reached by the twenty-second interview, in which the information and themes that emerged from the interview became repetitive. By the twenty-second interview, I felt confident that the information that was being offered by the participant was that which I had heard previously in the other interviews and at this point, there were no new concepts or ideas emerging from the interview. Thus, I concluded the data collection by the twenty-second interview.

6.2.1.3 Participants:

To ensure appropriate geographical representation, data was collected from participants at six different sites. Three of the sites were anatomical pathology departments within a public university, two sites were private laboratory practices, and one site was an independent practice. In considering the appropriateness of the sampling for this project, I recruited anatomical pathologists from both the private health sector as well as the public health sector. From the sample recruited, nine participants were currently employed in the public sector while fourteen participants were employed at the time of the interview in the private sector. Most of the participants who were employed in the private sector at the time of the interview also expressed, during the interviews, that they had previous experience in the public sector, usually as part of their specialist training in anatomical pathology. To ensure the adequacy of the sampling, I aimed at canvassing both anatomical pathologists with many years of experience in the field as well as those with minimal experience in the field. The range of experience was from two years to thirty-five years. The exclusion criteria were those anatomical pathologists

[45] Purposive sampling refers to the "selection of participants based on the researcher's judgement about what potential participants will be most informative" (Moser and Korstjens, 2018: 10).

with less than two years of experience in the field of anatomical pathology as those participants may not have been sufficiently exposed to the various facets of the practice.

6.2.5 Approach

A mailed information sheet and invitation was sent to a set of approximately five anatomical pathologists at a time. This was done to ensure that I had ample time to schedule the interviews with the participants and allow for any changes in interview schedule and allow for the interview to be carried out and be transcribed before inviting the next set of approximately five pathologists in the study. A total number of thirty invitations were mailed to anatomical pathologists. Each interview was conducted by me and commenced in a similar fashion. I travelled to a private venue of the participant's choosing arranged prior to the commencement of the interview.

I made use of an interview guide which was developed and approved as part of the protocol of this thesis which contained a list of questions used to guide me during the interview process. The interview guide consisted of the following: an introduction to the research study, opening questions, key questions, closing questions (See Appendix 3). In the beginning of each interview, I introduced myself to the participant and I introduced the topic and the aims of my research study. I began each interview by asking the participants if they have any questions regarding my study before commencing with the opening questions. In the opening questions, I asked participants why they had chosen this medical specialty, how many years they have been practicing and how the practice of anatomical pathology has changed over the years. These opening questions helped me build rapport with the participants as they shared their personal journeys in their chosen profession. The key questions in the interview guide related to the objectives in the empirical component which included an exploration of the views of anatomical pathologists regarding their role within the healthcare team and the significance of the relationship with the clinician. Furthermore, participants were requested to select the characteristic traits of an ideal anatomical pathologist and were asked whether they had encountered any ethical issues with the introduction of emerging molecular techniques. During the interview, as part of answering the second objective of the study which is to explore the views of anatomical pathologists regarding the characteristic traits of the 'ideal anatomical pathologist' to illustrate which virtues anatomical pathologist find important as a way of advancing the ends of anatomical pathology practice, the participants were presented with a list of twenty-four-character strengths from the Values in Action Inventory of Strengths (VIA-

IS). This list was developed by Peterson and Seligman (2004) from which participants were asked to select the character strengths which best describe a good pathologist. In the Values in Action Inventory of Strengths (VIA-IS) "Six virtues – wisdom, courage, humanity, justice, temperance, and transcendence – were identified as core characteristics valued by moral philosophers and religious thinkers across time and world cultures" (Niemiec, 2013: 11; Peterson and Seligman, 2004). I ended each interview with a closing question in which I asked participants how they see the role of pathology in the future, after which I thanked them for their valuable time and ended the interview.

6.2.1.4 Tools

I chose to use face-to-face semi-structured interviews as my aim was to explore the experiences, perceptions, and thoughts of anatomical pathologists as a way of informing the normative component of the virtue ethics framework. As previously mentioned, I made use of an interview guide that consisted of open-ended questions which allowed me to focus on specific aspects of the objectives in the study during the interviews while, at the same time, being flexible enough to allow the participants to share their experiences and thoughts freely and add any details which they deem important.

In respect to the tools for the identification of virtues, I undertook a literature review to establish which method is the most adequate psychometric measures of professional virtues in healthcare. I chose to use the twenty-four-character strengths from the Values in Action Inventory of Strengths (VIA-IS) developed by Peterson and Seligman. This VIA-IS classification represents the most widely utilised and successful psychometric evaluation for profiling character strengths and virtues with "twenty-four corresponding strengths of character – "psychological ingredients" or pathways to those virtues – emerged out of a lengthy list of candidates that were thoroughly examined" (Niemiec, 2013: 11). Interestingly, these character strengths have been shown to be universal amongst different cultures and religious beliefs and "substantially stable, universal personality traits that manifest through thinking (cognition), feeling (affect), willing (conation or volition) and action (behaviours)" (Niemiec, 2013: 12). These characteristic traits which have emerged out of "positive psychological characteristics are considered to be the basic building blocks of human goodness and human flourishing" (Niemiec, 2013: 12). This research tool has been successfully utilised in an exploratory study for determining virtues in medical practice (Kotzee, Ignatowicz and Thomas, 2017).

The tool used during the interviews was the twenty-four-character strengths from the Values in Action Inventory of Strengths (VIA-IS), developed by Peterson and Seligman (2004). Participants in this study were asked to select the character strengths which best describe a good anatomical pathologist.

6.2.6 Data Collection and Analysis

6.2.1.5 Data collection:

I conducted twenty-two semi-structured interviews during the period of April 2018 to June 2018. The interviews were audio-recorded, and I made additional notes during the interviews. The interviews were scheduled for sixty minutes, but most interviews lasted approximately thirty to forty minutes. All interviews were face-to-face and took place in a venue of the participant's choosing, in most cases in their office, or a convenient room at their place of work. Two interviews were conducted in the participant's place of residence and one interview was conducted in a public venue chosen by the participant.

As part of the interview process, participants were asked what character traits they would consider ideal for an anatomical pathologist to have. The participants were presented with a list of twenty-four-character strengths from the Values in Action Inventory of Strengths (VIA-IS) developed by Peterson and Seligman (2004) and asked to select the character strengths which best describe an ideal anatomical pathologist. Participants were requested to choose and rank the five, or more character traits which they believed to be important for an anatomical pathologist to have. Interestingly, some of the participants in this study thought that a significant number of character traits were applicable to their practice; in those cases, the participants were requested to select as many character traits as they deemed appropriate and were requested to rank the various character-traits in order of importance. Furthermore, a couple of participants added their own character strengths which they thought to be essential, which were noted during the interview.

Data was collected using a spiral process. Each interview was transcribed when it was completed to identify key issues and make inferences to be used in the next interview as recommended by Hennink, Hutter, and Bayley (2011). If more than one interview was scheduled for a day, I made notes during earlier interviews about key issues identified in the preceding interview to enhance the questions and use these key issues in the following interviews (Hennink, Hutter and Bailey, 2011). All interviews were transcribed by an independent transcriber. Following the transcription, I verified each transcript against the

recorded interview to ensure the general correctness of the transcription as well as the correctness of the medical/ pathological terminology. Furthermore, I ensured that the words in the transcript reflected the intended meaning from the audio-recorded interview. To ensure anonymity, the audio-recordings were identified only by the interview number and were stored in a password protected computer.

All data was securely stored during the length of the study and will be securely stored for a duration of no less than two years after publication, alternatively a duration of no less than six years if no publication results from the study.

6.2.1.6 Data analysis

The data analysis in this thesis was supported by the qualitative data analysis software, MAXQDA. I analysed the data as follows. I began with de-identifying the interviews by assigning a number to each interview before the transcription by the independent transcriber. I verified the verbatim transcripts done by the independent transcriber against the audio-recorded data for each interview. Once I was satisfied with the correctness of the transcripts, I read each transcript to get an initial perspective of the data and I imported each interview in the data analysis software MAXQDA and organised the interviews by interview number within a MAXQDA created project. I began my analysis by exploring the data in each interview by intense and repetitive reading and by writing initial memoranda as I was progressing through the data. I assigned initial broad codes to the data sets and coded the segments in the text systematically for each interview. I then refined the code system by reading through each interview again. The data analysis was verified by the supervisor of this thesis to ensure that the process is not biased and to ensure that all relevant themes were adequately identified. During the analysis on the data, the following five themes emerged from the interviews which I discuss in more details in subsequent sections of this chapter:

i. The goals of the practice of modern anatomical pathology - guiding the clinician by means of the pathological diagnosis in the further management of the patient.
ii. Role-relationship (between anatomical pathologist-clinician) identified as central in achieving the ends of the practice
iii. Challenges in the relationship with the clinician – lack of communication (in the form of clinical information sharing) and lack of insight into the complexities of laboratory phases of the pathological diagnosis.

iv. The virtues of open mindedness, curiosity, love of learning identified as essential (from the broad virtue category of wisdom and knowledge); followed by authenticity and persistence and lastly, teamwork (from the broad virtue category of justice) identified as essential in the practice.

v. Issues of complexity, uncertainty, availability, and costs of biological markers (biomarkers), issues of confidentiality and findings unrelated to the initial diagnosis during the pathology diagnosis.

6.2.7 Trustworthiness

The trustworthiness of this study was ensured by using Lincoln and Guba's four criteria, namely, credibility, transferability, dependability, and confirmability (1985). I discuss each of these separately in the section below.

6.2.1.7 Credibility

- *Triangulation*

The credibility of the study, which refers to the internal validity, was insured by triangulation using a wide range of participants through triangulation via various data resources. This allowed me to get a rich picture of the experiences of the participants based on the contributions of a range of participants with varying degree of experience. The research participants were diverse both in terms of age, experience but also in terms of their background in pathology. Some of the participants had studied or worked in other countries apart from South Africa, and most had previous experience in both the public sector (either having completed the specialisation at a public institution and/or working in the public sector) as well as having experience in the private pathology sector. Site-triangulation was achieved by using research participants from several different organisations, both public (three public institutions) and private (three private institutions - one of which was an independent practitioner). Similar results emerged from the different sites, thus allowing me to get a better view of the realities of modern anatomical pathology practice. To ensure openness and honesty in research participants, each of the participants who was invited to participate in this study was given several opportunities to refuse to participate to ensure that the data was collected only from those participants who were genuinely prepared to take part and willing to offer their opinions and experience freely.

- Peer examination and scrutiny

The methodology used in this thesis and the initial findings of the empirical component of the project was presented at two postgraduate sessions and one journal club presentation to a postgraduate audience of academics and fellow peers. The questions raised during the presentation of the methodology used in the study and the initial findings from the empirical data assisted me in developing a clearer research design and strengthening the methodology in light of the comments received.

- Member checks

To ensure that the words in the transcripts match what they intended from the audio-recorded interview, the articulations in each interview were checked against the transcripts for correctness. The transcripts of the interviews as well as the data analysis was verified by the supervisor of this thesis to ensure that the process is not biased and to ensure that all relevant themes were adequately identified.

- Experience in qualitative research

In the interest of interview proficiency in qualitative methods, I attended a Qualitative Research Methods Course at the University of the Witwatersrand in 2017, before the commencement of the data collection. During this course, I gained knowledge in data collection, including proficiency in interviewing techniques and using MAXQDA software. I then attended another Qualitative Research Methods Course at the University of the Witwatersrand in 2020 (online) to refine my skills in data analysis using the MAXQDA software.

6.2.1.8 Transferability

Transferability indicates the external validity and "the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents" (Korstjens and Moser, 2018: 121). Transferability was ensured by providing contextual information regarding the manner in which the interviews were conducted and providing a detailed explanation of the various processes within the study for the reader to transfer and relate the findings of the study.

The participants were confined geographically to the region of Gauteng in South Africa. The decision not to include participants from other provinces was informed by the participants themselves who had indicated during the interviews to have previous experiences either training or working, or both, in other provinces and some, in other countries as well. The demographics of the participants who took part in the empirical study is presented in the charts below:

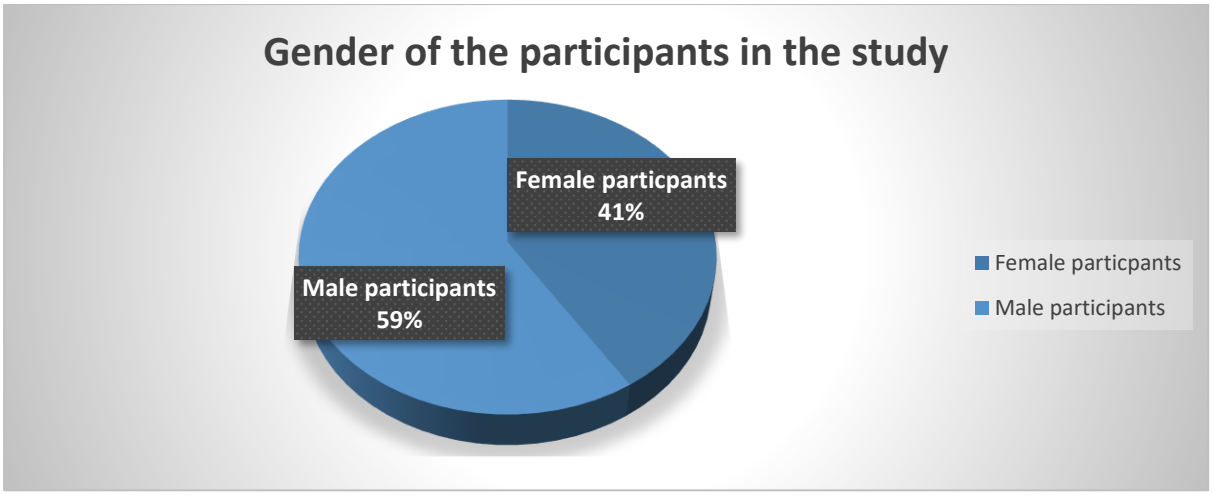

Figure 1: Pie chart showing the gender of the participants

Figure 1 shows a breakdown of the gender of the participants who took part in the empirical study as follows: nine of the participants were female while thirteen were male.

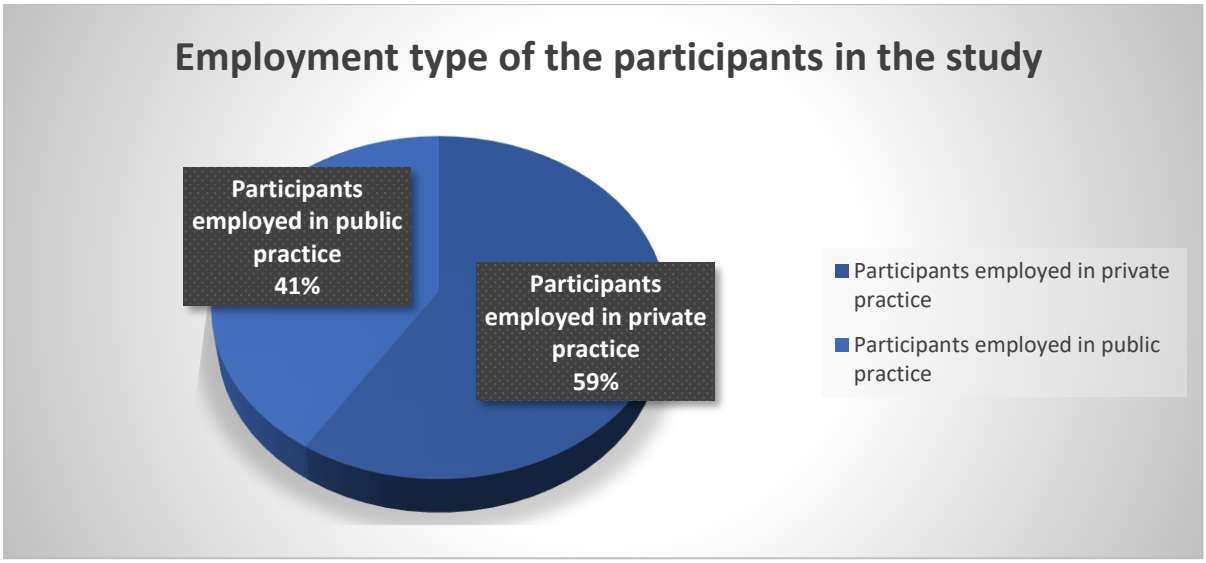

Figure 2: Pie chart showing the employment type of the participants

Figure 2 shows the breakdown of the employment type of the participants who took part in the empirical study as follows: thirteen of the participants were employed in the private sector at the time that the interview was conducted while nine of the participants were employed in public practice.

6.2.1.9 Dependability

Dependability, which ensures the reliability of the study, was ensured by providing an audit trail of various noteworthy documents, including the original audio recordings, the transcribed interviews, and signed informed consent form of each participant. I further provided a detailed

description of the research methods employed by providing contextual information regarding various aspects related to the collection of data, how the data is analysed as well as supplying a detailed description of the processes followed in the study in order for the study to be replicable in a different context. The raw data, including coding of the data set, categorising, and conceptualising the data, was evaluated by the supervisor of this thesis to ensure that the process is not biased and to ensure that all relevant themes are adequately identified.

6.2.1.10 Confirmability

Confirmability or objectivity was ensured by prolonged engagement using semi-structured interviews to minimise the effects of researcher bias and consensus discussion with the supervisor of this thesis.

6.2.8 Ethical considerations

Ethical clearance (No: H17/10/19) was obtained from the Human Research Ethics Committee (Non-Medical) of the University of Witwatersrand, prior to the commencement of the study. The study was conducted according to the principles outlined in the research ethics guidelines provided by the National Department of Health, Health Professions Council of South Africa and the Declaration of Helsinki of the World Medical Association. Throughout the study, I acted with integrity and respect in dealing with the research participants and in the handling of the research data by adhering to the principles of beneficence, non-maleficence and justice and protected the privacy, confidentiality, and anonymity of the participants in a respectful manner.

Signed informed consent was obtained from all participants who agreed to take part in this study. The informed consent form was approved as part of the protocol approval process. The informed consent form included several rubrics that had to be filled in by the participants (See Appendix 4). Each participant was requested to sign informed consent before the commencement of the audio-recorded interview. The consent form included an area where the participants were requested to circle if they agree to participate in the project, if they agree to have the interview audio-recorded, and if they agree to the use of anonymous quotes in the thesis. I made sure that participants were aware that participation is voluntary, and participants are free to withdraw at any time, without providing a reason, and that participants may decline to answer certain questions during the interview. This was written in the information booklet about the study (See Appendix 2) and was orally communicated to all participants at the commencement of every interview and audio recorded. Each interview began with an explanation of my project and a reminder that the participant is free to withdraw from this

research at any time and confidentiality and anonymity would be ensured throughout the study as no names would be used during data collection, analysis, and dissemination of the results of this study. The participants were made aware that everything they tell me would only be used for this research project and would not be shared with anyone outside the research team. Also, they were made aware that their name would not be used to make sure that no one can identify them and that they may decline to answer some questions in the interview, and should they wish to discontinue participation, they may do so freely at any time and without giving a reason. Before the commencement of each interview, I asked the participants if they had any questions. The audio material collected during the study was handled with integrity and kept locked in a safe place throughout the study.

6.2.1.11 Limitations of the study

As part of the anatomical pathologist-clinician-patient relationship, the choice to interview only anatomical pathologists is a limitation of the study as it lacks the opinions of the clinical counterparts and the patients. Subsequent research could complete the picture by investigating the opinions, views, and experiences of the clinicians as well as the patients involved in the tripartite relationship between the anatomical pathologist, clinician, and patient, thereby offering the perspective from all stakeholders in the team.

Another limitation of this study could be considered as the sample of participants, which may not have been perfectly unbiased. There is the possibility of response bias as the participation in this study was voluntary, and it could be argued that only those participants who were agreeably inclined to the topic of virtue ethics in the anatomical pathology practice agreed to participate in this study.

6.3 Empirical findings of the study

The empirical component of the study answered objectives I-IV which were as follows:

I. To explore how anatomical pathologists understand and view their current role within the healthcare team and the goals of their practice, as a way of informing the immediate ends of the practice.
II. To explore the significance of the anatomical pathologist-clinician relationship within the context of anatomical pathology practice and explore any difficulties encountered in the provision of diagnostic services in anatomical pathology and how these difficulties can be addressed.

III. To explore the views of anatomical pathologists regarding the characteristic traits of a good anatomical pathologist to illustrate which traits anatomical pathologists find important as a way of advancing the ends of the practice.

IV. To identify any ethical issues that may have resulted from the introduction of newly emerging molecular and genetic techniques, including biomarkers, to the routine practice of anatomical pathology.

In the section below, I present and discuss the findings of each empirical objective individually.

6.3.1 The role of the anatomical pathologists within the healthcare team and the goal of the practice

The first objective (I) in the empirical component of this thesis was to explore how anatomical pathologists understand and view their current role within the healthcare team as well as to explore how they view the main goal of their practice, as a way of informing the immediate ends of the practice. In the section below, I summarise the findings from the empirical component by dividing them into two sections as follow (a) the role of the anatomical pathologist in the healthcare team (b) goals of current anatomical pathology practice, respectively.

a) Role of the anatomical pathologist within the healthcare team:

One of the central features of the theoretical component in the virtue ethics framework that I propose in this thesis is the role-relationships in the practice of modern anatomical pathology and the duties that arise from those role-relationships. It is therefore important to gain insight into how the anatomical pathologists in current practice view their role within the chain of healthcare provision.

The results from the data analysis shows that there is consensus amongst all participants in this study regarding the role that anatomical pathologists play in the healthcare team, a role which they consider to be pivotal, the moment that a tissue diagnosis is required as part of the treatment plan for the patient. Participants used descriptions such as *extremely important; a very central role; absolutely central* in the whole process of diagnosis when explaining how they view their place within the healthcare team. All the participants called attention to the fact that they view their role as principally that of providing a pathological diagnosis. Most of the participants also detailed that the treatment for the patient (particularly for malignant diseases) cannot commence in the absence of a final pathological diagnosis and further explained that the pathological diagnosis has a significant influence on the further clinical management of the

patient. The participants in the study further expressed that they consider their role as a vital link between the basic sciences and clinical disciplines, a link which culminates in a timely and accurate diagnosis which assists the clinicians in choosing appropriate treatment options for the patient. One participant describes the role that anatomical pathologists play in the healthcare team as that of a movie director, pointing out the hidden position from which anatomical pathologists perform their role within the chain of healthcare provision. This participant describes the role of the anatomical pathologist within the healthcare team as follows:

> *I see myself as a producer of a movie or a director. We are actually behind the curtains. We never get to see the patients, but we actually direct everything that happens in the medical field. So, our role basically is to direct management, prognosis, and outcome for the patient, so that's what we are, unfortunately we are behind closed curtains, and we never get to be seen* (anonymous quote - study participant).

Another participant interestingly describes the ideal role of the anatomical pathologist within the chain of healthcare provision by referring to the important collaboration with the treating clinician and the link between the pathologist-clinician-patient, which the participant considers to be important for the treatment and management of the patient. Apart from that, the participant highlights that this collaboration is significant in gaining feed-back, whether the diagnosis that the pathologist provides is the appropriate one in the clinico-pathological context. The participant remarks:

> *I think the ideal position would be that the pathologist is the link between the clinician and the patient in the sense that you provide a diagnosis that allows further treatment and management but that means you should have a close collaboration with the clinician to also know whether your diagnosis which may be very reasonable is indeed the appropriate diagnosis* (anonymous quote - study participant).

The following participant explains the role of the pathologist as a supportive one to the clinician but also mentions an important aspect of the pathological diagnostic process, namely, the communicative domain. This participant considers that the role of the anatomical pathologist is to:

> *Make a diagnosis and support the clinician, provide adequate explanation on the pathology report* (anonymous quote - study participant).

Generally, participants were of the view that healthcare provision (in cases in which the diagnosis cannot be made on clinical findings alone and require further histopathological diagnosis) would be fractured without this vital link, as treatment of the patient cannot commence in the absence of a final diagnosis. As stated by this participant:

> *In many instances the treatment can't continue without our confirmation of the diagnosis you know, which is just a practical term in South Africa for example, oncologists can't treat a cancer patient until they have a relevant diagnosis made by us [anatomical pathologists][46] with the correct diagnostic codes* (anonymous quote - study participant).

Most of the participants pointed to the fact that there seems to be a generalised lack of insight from those healthcare practitioners in the clinical disciplines regarding the various processes involved in the different phases of the pathological diagnostic process (which I explore further when discussing the empirical data related to the relationship with the clinician). Three of the participants detailed that they feel undervalued within the healthcare team. The following quotations, presented in bulleted form below, exemplify these sentiments:

- *I think it [pathology] is undervalued because people don't realise the skill that we need to have in order to integrate all the knowledge that we have into a [microscopic][47] slide, generate a report, put all the things together, people can't see that* (anonymous quote - study participant).

- *I think we are completely undervalued in the team, because often the buck stops with us. So, if a patient presents with a say a breast mass, the patient has a mammogram and the radiologist will say, well there is a mass, it could be malignant and it could not be malignant. And we are in the end the ones who have the final say yes, it is cancer or no it is not cancer* (anonymous quote - study participant).

[46] My addition in brackets.
[47] My addition in brackets.

In summary, the analysis of the findings in this study reveals that those in the practice of anatomical pathology view their role as fundamentally rooted in the diagnosis of the disease. Furthermore, participants emphasized that the pathological diagnosis forms the basis for the further therapeutical management of the patient. In this way, anatomical pathology provides an essential link in the chain of healthcare provision, which is unfortunately not always understood or valued. Lastly, in the cases where a tissue diagnosis is required, the participants in this study expressed that they view their role as guiding the management of the patient.

In the next section, I focus on the second component of the first objective of this study which represents the goals of current anatomical pathology practice.

b) Goals of current anatomical pathology practice

If we recall from chapter five, inasmuch as anatomical pathology relies heavily of laboratory techniques, it in fact, functions within the undefined and blurred lines at the level of clinico-pathological correlation, which places the practice *somewhere* between laboratory medicine and clinical medicine. But that *somewhere* needs to be clearly established and substantiates further exploration by means of a teleological virtue ethics approach through which the ethical responsibilities of the pathologist can be determined.

One of the aims of the empirical component of this thesis is to gain the perspective of those in current practice regarding how they view the goals that anatomical pathology aims to achieve. This perspective is valuable in informing the *somewhere* by way of identifying the immediate ends of modern anatomical pathology practice. The identification of the immediate ends is significant on the teleological virtue ethics framework that is relevant to the current scope of the practice. Accordingly, the identification of the immediate ends offers clear justification for the ethical duties and virtues within specific role-relationships while being in line with the final ends of the practice (and in synchrony with the ends of clinical practice), namely, the wellbeing of the patient in respect to health.

Regarding the current goals of anatomical pathology practice, each of the twenty-two participants mentioned that, fundamentally, the goal of the practice is to establish a diagnosis, either by making direct mention of this diagnosis or by making mention of the generation of a pathological report. This is not surprising since the pathological diagnosis is the *sine qua non* of pathology practice and the distinguishing feature from the other medical disciplines, which in turn, influences the unique placement of the practice within healthcare provision. Interestingly, apart from the pathological diagnosis, the participants in this study indicated

several other features which they believed form an integral part of the goals of their practice. A significant theme which emerged in this regard was that twelve of the anatomical pathologists interviewed were of the view that the goal of their practice is to aid/ guide/ help the clinician in the further management of the patient by means of the pathological report. A few anonymous quotations from the participants of this study exemplifying their views concerning the current goals of anatomical pathology, are presented below in bulleted form:

- *To make a diagnosis, help with management and prognosis, and improve the life expectancy of the patients, those that have disease* (anonymous quote - study participant).
- *To aid in treatment of patients, to guide the treatment* (anonymous quote - study participant).
- *Our outcome is a diagnosis and often we also advise the clinician on the broad principles of the management of the tissue change. So, it is a pivotal discipline in the line of management of a patient* (anonymous quote - study participant).
- *To be part of that management team and to guide patient management* (anonymous quote - study participant).

One participant further highlights that apart from an accurate and timely diagnosis, it is also important to communicate relevant information to the clinician in such a way that the diagnosis is helpful for the further management of the patient. If we recall from chapter two, it is during the communicative domain that the pathologist describes and interprets the various aspects identified in the cognitive domain and conveys these findings via the written pathological report to the clinicians, in such a way as to guide them optimally in selecting the most appropriate treatment. This aspect is similarly reflected in how the following participant views the goals of the practice:

> *The ideal is to be able to make the right diagnosis, within an acceptable timeframe and not only that, but I also feel the report that you authorise and sign out for the clinician to use should be able to help them to further manage the patient* (anonymous quote - study participant).

This is a significant resultant theme which reiterates the significance of the communicative domain. In the communicative domain, the use of clear and concise reporting skills and mutual

understanding between the anatomical pathologist and the treating clinician is pivotal as misunderstandings during this domain can negatively impact on the well-being of the patient; an aspect overlooked in the ethics literature.

Apart from the establishment of a diagnosis and guiding treatment, several other elements that form part and parcel of the diagnosis and that further aid in the management of the patient have been identified by the participants in the study. These elements are summarised in bulleted form below:

- *Confirmatory element* – confirming that the right tissue sample has been submitted for diagnosis as well as confirming the intra-operative diagnosis - in the form of a frozen section.
- *Predictive element* - prognosing whether the disease is likely to respond to the treatment.
- *Monitoring element* – monitoring treatment outcomes in terms of the response to various treatments.
- *Preventative element* - in the form of early detection of disease (particularly malignant disease) through screening programmes.

Finally, some of the participants also designated a research goal to the practice. To this end, the participant stated that another goal of the practice is "*contributing to the research base that will eventually increase our ability to extract knowledge from large datasets*" (anonymous quote - research participant). Some of the participants identified peer reviewed publications as one of the methods through which anatomical pathologists contribute to the distribution of knowledge of diseases processes for improved healthcare.

The analysis of the findings of the study indicates that the goals of the practice of modern anatomical pathology, as viewed by those in the practice can be summarised as: serving through the pathological diagnostic report (which constitutes the diagnosis) in **guiding the treating clinician in the further management of the patient**. In this way, modern anatomical pathology practice contributes to the overall well-being of the individual patient as one participant explains thereby "*contributing to healing the patient or giving them the best possible outcomes given the circumstances that they have*" (anonymous quote - study participant). These goals of the practice inform the immediate ends of the practice and the

unique role-relationships in the context of the virtue ethics framework that I propose in this thesis, which I discuss in further detail in the subsequent chapter.

Having presented the empirical findings representing the views of those in the practice related to the role within the healthcare team and goals of their practice, I advance in the next section to an analysis of the second empirical objective of the study which aims to explore how anatomical pathologists view the significance of their relationship with the clinician.

6.3.2 Significance of the relationship with the clinician

Given that anatomical pathologists rarely have direct contact with patients and that the principal relationship is with the clinician, the participants were asked to share their views and experiences regarding the relationship with the clinician. They were also asked how important this relationship is for the general good of the patient. The participants were also asked whether they had encountered any challenges in this relationship and if so, how these challenges could be resolved.

The results from the data analysis for this objective shows that there is consensus among all the participants that the relationship with the clinician is essential for the general benefit of the patient. Each of the twenty-two participants explained how important this relationship is in terms of the practice of anatomical pathology and in terms of the well-being of the patient. One of the participants had this to say regarding the significance of the relationships with the clinician:

> *I don't even have the right words to use to describe how important it is for the anatomical pathologist and the clinician to have a good relationship; if you don't have a good relationship with them [the clinician][48] it creates a lot of room for a lot of chaos* (anonymous quote - study participant).

Another participant described the relationship with the clinical as follows:

> *A very important relationship which must be maintained. It must be harmonious at all times because this hand must always know what the other hand is doing. There are instances where I cannot proceed with a biopsy, for example, a liver biopsy, I need a lot of information from the clinician, for*

[48] My addition in brackets.

> *example, her pathology. I need clinical history, a detailed drug history, I need a medical history, and then I also need to know if the patient has got any carcinomas elsewhere, things like that. So, it's very integral, we work hand in hand, I can't work in isolation, that's the bottom line* (anonymous quote - study participant).

Participants in this study shared many pathology-based case scenarios during the interviews. These scenarios revealed that information[49] received from the clinician regarding the condition of the patient has a considerable impact on the diagnosis. They related that although in many scenarios, the diagnosis of the disease the patient suffers from may be straightforward and may not require additional information; several pathological entities warrant additional clinical information. This clinical information may distinguish between diagnosing something as malignant or benign, or providing an accurate diagnosis rather than just a descriptive diagnosis due to the absence or presence of such information. The scenarios shared by the participants, exemplify that information as basic as the age of the patient can steer the diagnosis from a benign lesion to a malignant lesion which has serious treatment consequences for the patient. Additionally, lack of information sharing also has cost implications as more elaborate and expensive investigations would be necessary to arrive at a diagnosis in the absence of the clinical input from the clinician. The scenario presented by the participant below exemplifies this:

> *If they [the clinicians][50] send us a colon biopsy and they just write colon biopsy, and you see normal colon and you send it out as a normal report, but if they tell you there was a polyp, then you say ok well, maybe I should cut deeper into the block and then on your sixth level you see a little polypoid lesion. So, if you know what why they biopsied, then it guides you on how far you should go…then you have to put the clinical and the pathological findings together to have a sensible report, otherwise you give them [the clinicians][51] a descriptive report that doesn't necessarily help* (anonymous quote - study participant).

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[49] Information relating to, amongst others, age, gender, family history, history of the disease, medication previously taken by the patient, other co-morbidities, previous diagnosis of malignancies, signs and symptoms of the disease and ancillary testing such as X-rays, blood and urine analysis.
[50] My addition in brackets.
[51] My addition in brackets.

A very strong theme which emerged from each of the twenty-two interviews in this study when discussing the significance of the relationship between themselves and the clinicians, was regarding the main challenge that they face in terms of this relationship which is the lack of clinical information sharing from the clinical colleagues. All the participants indicated that although in some cases, the additional clinical input may not be crucial, there are nonetheless a significant number of cases in which the clinical input is missing which has a detrimental impact for the pathological diagnoses and in turn, for the treatment outcomes of the patient. If we recollect from chapter two, this data otherwise known as the clinical information is valuable for the anatomical pathologist as it forms part and parcel of the generation of the initial hypothesis which needs to be incorporated in the cognitive domain of the pathological diagnostic process (Pena and Andrade-Filho, 2009). This feature of the cognitive domain requires the integration of both the "pathological strategies (searching for additional histological evidence, ordering special stains and immunohistochemistry) and parapathologic (ie., searching clinical, laboratory, radiologic data) strategies that will reduce the length of the list" in the differential diagnosis (Pena and Andrade-Filho, 2009: 125). All the participants in this study similarly explained how significant the clinical information is for the establishment of the final diagnosis. As this research participant explains, the clinical information has implications for the outcome of the diagnosis as the practice of anatomical pathology takes place in isolation in which:

> *We need their [the clinician's][52] input to reach the correct diagnosis and they need us to manage the patient further, in which the information is related. But I think it is very important. We need the clinical input. We are a discipline in isolation, and I think it is very important, their input. It's often not the case. We don't get the input in many cases and that, either sort of leads to non-specific finding, or call it, the wrong conclusion* (anonymous quote - study participant).

Another participant elaborates on the significance of clinical information by referring to an analogy of working with a computer as follows:

[52] My addition in brackets.

> *All those aspects [related to the clinical information][53] are pivotal to the outcome of the diagnosis. It is like a computer. The quality of what you feed into a computer will determine the quality of the outcomes. So, if the facts that are then fed into the diagnostics is a defective one, then we are likely to establish an incorrect diagnosis…Without an accurate diagnosis everything that follows is wrong. And this is, I think one of the greatest pitfalls* (anonymous quote - study participant).

The participants offered a few possible explanations for the reason why this clinical data is sometimes not readily available from the clinical colleagues. Some of the participants related that their clinical colleagues often have extremely busy schedules and at times may be understaffed so there may be scenarios in which junior colleagues are given the responsibility of filling out the pathology request form. The junior staff may not be aware of the full clinical picture or may not have insight into the significance of the clinical information for the diagnosing pathologist. Other participants related that some of their clinical colleagues may not have sufficient insight into the importance of the clinical information that needs to be incorporated in the pathological diagnostic process as they may not have been sufficiently exposed to the technical and human tasks involved during their undergraduate training. A couple of the participants believe that there is a perception on the part of the clinicians that since the anatomical pathologist has received the biopsied specimen, they already have the information required in the form of tissue sample so there is no need for additional information. This participant states that there is a:

> *General belief between clinicians that once you see a section on a slide, that you can make the diagnosis like 'boom'. You don't need all the other information. So, they don't see the necessity of all the other information, for example they don't complete the request form and we often get a specimen which you don't even know where it comes from* (anonymous quote - study participant).

Another interesting explanation offered by a participant in respect to the lack of communication of relevant clinical information is that some clinical colleagues do not wish to influence the

[53] My addition in brackets.

pathological diagnosis by offering too much information which may negatively impact the diagnosis. The participant says that:

> *Some clinicians say, we don't want to bias you, or we don't want to try and influence you. But I don't think that that's true. I think a good history is very relevant and also with an opinion from the clinician: 'I personally am concerned for this'…'I'm concerned this may actually be cancerous', I mean you, you'd rather work it up*[54] (anonymous quote - study participant).

This implies that apart from an adequate history of the disease and the relevant clinical information, a helpful piece of information for the pathologist is a reflection from the clinician regarding their concerns with this case. This is significant as the clinicians get to see the patient, get to know the patient and perhaps in some cases, develop durable relationships and this information could be valuable in the diagnostic process. As eloquently described by this participant:

> *They [the clinicians]*[55] *are our eyes, they are our ears, they actually do see for us, and they relate for us [to the patient].*[56]*Because we are not there to actually see what is happening in the hospital, and pathology is very interesting because what could be a benign tumour in a two-year old, could be a malignant tumour in a seventy-year-old. So, if you don't have that communication for example, if you do not know how old the patient is, if they haven't written it for you on the [pathology] form and you do not communicate with them and say, it looks like this, but how old is the patient? Then just that little information switches the entire diagnosis* (anonymous quote - study participant).

Apart from the scarcity of clinical information, another challenge identified in the relationship with the clinician was the lack of insight regarding the limitations of a type of immediate intraoperative diagnosis, known as a frozen section.[57] A few of the participants related that the

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[54] The term 'work it up' in this context refers to applying additional staining techniques to eliminate the various differential diagnoses which could be attributed to the case.
[55] My addition in brackets.
[56] My addition in brackets.
[57] The term frozen section refers to a type of immediate intraoperative diagnosis which guides the surgeon as to whether the tumour has been resected with wide enough margins.

some of their clinical colleagues have unrealistic expectations regarding the benefit, indications, and limitations of the type of immediate diagnosis which leads to potential for conflict between them. Lastly, another challenge in the relationship with the clinician related by some of the participants is the expectation of a prompt diagnosis in all cases submitted. The participants related that at times a swift diagnosis may not be possible given the intricacies of diagnosing the disease involved, at times due to the absence of adequate clinical information which necessitates the application of further laboratory techniques which are labour intensive and time consuming, aspects which are at times not understood or appreciated by their clinical colleagues.

When asked how they believe the challenges identified in the relationship could be addressed, most of the participants considered that better communication between the pathologist and the treating clinician would go a long way in addressing the problems. Furthermore, some of the participants considered that the best way to address the problem is through regular multidisciplinary meetings in which the various stakeholders from various disciplines collaborate by discussing the cases as a team, particularly the difficult cases, rare cases, or those cases in which the diagnosis has grave consequences for the patient (for example the loss of a limb). According to Basta *et al.* multidisciplinary meetings are also designed to "optimize the diagnosis for patients with malignancies, thereby increasing the likelihood that patients will receive the best possible care" (Basta et al., 2016: 2430). Furthermore, these multidisciplinary meetings which "consist of healthcare professionals from different disciplines who offer their specific service and contribute to the best care for each individual patient" by improved communication between the various healthcare practitioners involved in the case (Basta *et al.*, 2016: 2430). As mentioned previously in chapter five, of note is that in their research they found that "the presence of the treating physician is the most important factor to ensure a correct diagnosis and adherence to the treatment plan" and recommended that "every patient discussed by an MDT[58] should be presented by a physician who has seen and talked to the patient" (Basta *et al.*, 2016: 2430; 2436). Similar findings emerge from this study, which reveal the importance of the intimate knowledge that the treating clinician gains during the clinical encounter with the patient which the anatomical pathologist needs to incorporate in the diagnostic process to optimally serve the benefit of the patient.

[58] MDT refers to a multidisciplinary team.

Apart from interdisciplinary meetings, some of the participants were of the view that another solution can be found in the adequate exposure to laboratory medicine by means of rotation in the Department of Anatomical Pathology during undergraduate and postgraduate training of healthcare practitioners in the clinical disciplines. In this way, students gain insight into the significance of information sharing with the pathologist as well as the various laboratory phases and human tasks involved in the diagnostic process. This would go a long way to understanding some of the constraints inherent to the practice, for example, that the laboratory methods are labour intensive and time consuming. One of the participants believes that anatomical pathologists have an important role to play in sensitising clinicians to the various challenges encountered in routine anatomical pathology through:

> *Communication and even you now, these mini-workshops that the pathologists can give to the clinicians, really clarifies a lot of things that before we get to the programmes…at the beginning of the year then we can sit and talk about the challenges that we had the previous year, this is how we can improve them* (anonymous quote - study participant).

In summary, the findings in the study related to the relationship with the clinician highlights that this relationship is central and internal to the practice of modern anatomical pathology as it is largely through the treating clinician that the anatomical pathologist contributes to the well-being of the patient. In other words, an effective relationship between the clinician and the anatomical pathologist furthers the ends of the practice. Stempsey shares similar views regarding the importance of the relationship between the pathologist and the clinician and designates this relationship as one of the internal goods in pathology practice. He is of the view that it is through the proper clinician-pathologist relationships that technological competence (which represents another of the internal goods of pathology practice) can be translated to the good of the individual patient. He writes:

> If technological competence is an internal good of the practice of pathology, it is a good in that it serves to further the end of the practice…because the pathologist's relationship with the patient is usually not a direct one, it is largely through the clinical physician that the pathologist contributes to patient welfare. The virtuous pathologist, then ought to develop habits and dispositions that further his or her relationship with clinical physicians (Stempsey, 1989: 737).

I agree with Stempsey's views that an effective pathologist-clinician relationship achieved through adequate collaboration represents an internal good in the practice of modern anatomical pathology which reflects the central values in pathology and furthers the ends of the practice. As Stempsey explains, it is through these relationships that arise from the characteristic features of the practice that the anatomical pathologist can contribute to the wellbeing of the patient as:

> This relationship seeks to provide benefits to patients and is essential if the understanding gained from the use of laboratory methods is to become useful to the people who actually have diseases (Stempsey, 1989: 732).

Having characterised the anatomical pathologist-clinician relationship as one of the internal goods in the practice of modern anatomical pathology, in the next subsection, I analyse the findings from the empirical component regarding the character traits of a good anatomical pathologist as selected by the participants in this study. These findings serve to inform and justify the professional virtues which are needed to serve the current ends of the practice adequately.

6.3.3 Identifying the professional virtues

Thus far, from the empirical data from the study, I have identified the immediate ends of the practice of anatomical pathology and designated the role-relationship with the clinician as being an internal good in the practice.

In this subsection, I present the empirical findings concerning the views of anatomical pathologists in relation to the characteristic traits of a good anatomical pathologist. As mentioned earlier in chapter five of this thesis, in the teleological framework that I propose, virtues represent dispositions to act in such a manner so to achieve the ends specific of the practice and further the internal goods. Moreover, as previously indicated in the virtue ethics framework that I propose, establishing which character traits are virtues is achieved empirically by evaluating which specific traits are needed in the context of this practice to achieve the immediate ends identified and further the internal goods.

At this juncture, it is important to mention that my intention with this objective of the empirical component is not to identify an exclusive or exhaustive list of virtues for modern anatomical pathology practice. Rather, my aim is to concretise the virtues that are unique to the practice of modern anatomical pathology and are relevant in furthering the immediate ends identified

for the practice. To accomplish this, I firstly present the findings from the empirical component of this thesis which sheds light on the views and opinions of the anatomical pathologist regarding the virtues which they consider important for an ideal anatomical pathologist to possess and develop. Later, in chapter seven, I evaluate these findings against the theoretical virtue ethics conception of the proposed virtue ethics framework within the specific role-responsibilities identified and against the immediate ends designated in the empirical component.

During the semi-structured interviews, the participants were presented with a list of twenty-four-character strengths included in the Values in Action of Strengths (VIA-IS) (Peterson and Seligman, 2004). The list is divided in six broad categories of virtues, namely (1) wisdom and knowledge, (2) courage, (3) humanity, (4) justice (5) temperance and (6) transcendence (Peterson and Seligman, 2004). These six broad categories of virtues which are called 'the High Six" represent "the core characteristics valued by moral philosophers and religious thinkers" (Peterson and Seligman, 2004: 13).

Peter and Seligman (2004: 13) further argue that the character strengths under each of the six categories of virtues:

> Are the psychological ingredients—processes or mechanisms—that define the virtues. Said another way, they are distinguishable routes to displaying one or another of the virtues. For example, the virtue of wisdom can be achieved through such strengths as creativity, curiosity, love of learning, open-mindedness, and what we call perspective—having a "big picture" on life. These strengths are similar in that they all involve the acquisition and use of knowledge, but they are also distinct.

I discuss the empirical finding from each of the six categories individually in the sections below.

Wisdom and knowledge

The first rubric represents the general virtue of wisdom and knowledge which relates to the positive character trait specific to the "acquisition and use of information in the service of the good life" (Peterson and Seligman, 2004: 95). The following five specific character strengths are considered as cognitive strengths as follows:

- Creativity: thinking of novel and productive ways to do things
- Curiosity: taking an interest in all ongoing experience

- Open-mindedness: thinking things through and examining them from all sides
- Love of learning: mastering new skills, topics, and bodies of knowledge
- Perspective: being able to provide wise counsel to others (Peterson and Seligman, 2004: 29).

An analysis of the data reveals that this broad category of virtue of wisdom and knowledge emerged most vigorously from the six categories of virtues. More specifically, from the five-character traits under this category, the participants were of the view that the most relevant character trait is that of open-mindedness [sixteen out of the twenty-two participants chose this character trait as one of the top five trait significant in the practice]. The second relevant character trait to emerge vigorously from the data was that of love of learning [fifteen out of twenty-two chose this character trait as one of the top five trait significant in the practice], followed by curiosity [ten out of twenty-two] and lastly, perspective [seven out of twenty-two chose this character trait as one of the top five trait significant in the practice]. The character trait of creativity was not considered by the participants in this study to be essential in their practice.

I discuss each of these character traits individually in the section below. The first characteristic trait that emerged strongly from the empirical data is open-mindedness. Open-mindedness is defined as "the willingness to search actively for evidence against one's favored beliefs, plans, or goals, and to weight such evidence fairly when it is available" (Peterson and Seligman, 2004: 144). Peterson and Seligman consider that open-mindedness is:

> A strength included in virtually all virtue catalogues, ancient and modern, is one that refers to a way of thinking variously referred to as judgment, critical thinking, rationality, or open-mindedness (Peterson and Seligman, 2004: 100).

In the context of anatomical pathology, this character trait is required during the cognitive domain of the pathological diagnosis phase that Pena and Andrade-Filho describe. This phase relates to the interpretation and perceptions of the pathologist and analysis of what she observes macroscopically and microscopically. This phase commences once the tissue sample has been prepared and the generation of an initial hypothesis or differential diagnosis is based on the findings from the analytical phase, a process which is susceptible to inter-observer and intra-observer variations (Pena and Andrade-Filho, 2009). It is through the integration of the various cognitive analytical processes that the anatomical pathologist formulates an initial hypothesis.

Love of learning is considered a cognitive strength that entails acquiring new knowledge and skills (Peterson and Seligman, 2004). According to Peterson and Seligman (2004: 104), this character trait is "valued in its own right…indeed love of learning is valued in virtually all roles…it is morally valued". Furthermore, "people who possess the general trait of love of learning are positively motivated to acquire new skills of knowledge or to build on existing skills and knowledge" (Peterson and Seligman, 2004: 103). In the practice of modern anatomical pathology, love of learning is required in keeping abreast with rapidly evolving scientific discoveries made in various fields of medicine that influence the practice of anatomical pathology, as this participant puts it:

> *There must be a love of learning - I mean the subject [of pathology][59] changes every day and if you don't want to learn you are going to stay behind* (anonymous quote - study participant).

Furthermore, being internally motivated to continually improve one's knowledge is significant, given the novel developments in biomedical technology in the field of personalised medicine and the emergence of new classifications of disease entities, new biomarkers, and new developments in molecular testing. Indeed a few interesting remarks are made by the participants in this study regarding the emergence of new biomarkers and the need to keep up to date with these developments. One participant describes the rapid pace at which new research into diagnostic biomarkers advances as follows:

> *You learn about a stain today, that's specific for let's say, for example, breast carcinoma and then three months along the line there are new articles saying that specific stain is now also a stain for bladder carcinoma. So, initially we thought it was specific for breast carcinoma and you diagnosed carcinoma left right and centre, based on the positivity of the stain* (anonymous quote - study participant).

This trait is significant in mastering the new body of knowledge regarding the latest developments in the field which are evaluated and implemented in the pathological diagnostic process as a way of ensuring that the selecting treatment options are in line with the latest developments in personalised medicine.

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[59] My addition in brackets.

The third character trait, that of curiosity refers to "finding subjects and topics fascinating; exploring and discovering" and is closely related to the character trait of love of learning (Peterson and Seligman, 2004: 29). This character trait is significant in the practice of anatomical pathology, given that the pathological diagnostic process is a type of investigative plan of action that is dynamic and requires an inquisitive mind that is willing to continuously search for answers. According to Peterson and Seligman, the character trait of curiosity is fulfilling for the individual who is so inclined. They write:

> Finding out an answer, having a new experience, learning a new fact—all satisfy the curious individual. Someone who is not curious evidences no such fulfillment and may even be disquieted by novel experiences (Peterson and Seligman, 2004: 98).

Finally, the character trait of perspective and the ability to 'give wise council' is significant in the practice of anatomical pathology in the communicative domain of the pathological diagnosis process. During this phase of the diagnostic process, the anatomical pathologist communicates the diagnosis in such a way that it is helpful in guiding the clinician in the further management of the patient.

A notable theme which emerged from the analysis of the data, and which is not reflected in current ethics literature, is in respect to the character traits that the participants in the study selected the most character traits from the broad virtue category of *wisdom and knowledge*. This is a significant finding which highlights the cognitive character of the practice. This cognitive strategy relies heavily on the integration of the various intellectual analytical processes, which the anatomical pathologist makes use of in the formulation of the initial hypothesis. This strategy is followed by the interpretation and integration of the clinico-pathological elements. It is not surprising that most of the character traits chosen by the participants in this study centre around the intellectual virtues.

Courage

The second broad virtue category of courage refers to "emotional strengths that involve the exercise of will accomplish goals in the face of opposition, external or internal" (Peterson and Seligman, 2004: 29). There are four specific character traits that characterise the strength of courage as follows:

- Authenticity: speaking the truth and presenting oneself in a genuine way
- Bravery: not shrinking from threat, challenge, difficulty, or pain

- Persistence: finishing what one starts
- Zest: approaching life with excitement and energy (Peterson and Seligman, 2004: 29).

The character trait of *authenticity* was the most prominent trait to emerge from the empirical data being chosen by eighteen out of the twenty-two participants in this study as the top-five character traits of an ideal anatomical pathologist. Peterson and Seligman consider that authenticity can be considered as "speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretence; taking responsibility for one's feelings and actions" (Peterson and Seligman, 2004: 20). They further have the following to say about the character trait of authenticity:

> The person who speaks the truth is honest, but we regard this character strength in broader terms. It includes truthfulness but also taking responsibility for how one feels and what one does. It includes the genuine presentation of oneself to others (what we might term authenticity or sincerity), as well as the internal sense that one is a morally coherent being (what we might term integrity or unity) (Peterson and Seligman, 2004: 205).

Furthermore, they note that authenticity is morally valued, particularly in personal relationships. They write:

> We can forgive our friends and lovers for treating us poorly but misrepresenting themselves or deceiving us takes matters to a different plane of transgression. Studies of the most valued traits among friends and spouses always identify honesty and dependability as paramount (Peterson and Seligman, 2004: 206).

Similar viewpoints were shared by the participants in this study regarding the value of authenticity in their practice. This participant believes that:

> *Authenticity is one the most important traits in pathology. The patient's life is going to be changed because of the report that you send out and one should keep that in mind. The moment you lie in pathology you have transgressed a fundamental line, and you are not to be trusted ever again* (anonymous quote - study participant).

Another participant is of the view that authenticity is central to the routine practice of anatomical pathology. The participant considers that:

> *Authenticity underlines everything that we do, you have to tell the truth to start with, because you have to say what you see. So, objectivity and clinical scientific hard facts should form the basis of everything that we do* (anonymous quote - study participant).

The second character trait chosen from this rubric by ten of the participants was that of persistence, which is defined as "voluntary continuation of a goal-directed action in spite of obstacles, difficulties, or discouragement; taking pleasure in completing tasks" (Peterson and Seligman, 2004: 29).

The last characteristic trait under this rubric chosen by the participants was that of bravery. Bravery is defined as that character trait of:

> Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it (Peterson and Seligman, 2004: 44).

Bravery or courage, according to Comte-Sponville (2001:44), is morally valuable and praiseworthy and the ability "to overcome fear is always more valued than cowardice or faintheartedness". Courage in turn, can be of three types, that is physical, moral, and psychological (Putman, 1997). Physical courage refers to the traits needed "in overcoming the fear of physical injury or death in order to save others or oneself" while moral courage denotes "ethical integrity or authenticity at the risk of losing friends, employment, privacy, or prestige" (Peterson and Seligman, 2004: 36). Lastly, psychological courage refers to the character trait needed "to confront a debilitating illness or destructive habit or situation; it is the bravery inherent in facing one's inner demons" (Peterson and Seligman, 2004: 36). Kotsonis adds a fourth dimension to courage, that of intellectual courage, which he defines as:

> Dispositions such as the courage to doubt oneself and others, the courage to believe as well as the courage to investigate despite internal and external threats and the courage to express opinions, thought and judgements (Kotsonis, 2021: 10).

This type of intellectual courage has significance in the practice of anatomical pathology particularly in the communicative domain of the pathological diagnosis process. If we think of, for example, the courage to defend the validity of final pathological diagnosis, specifically in complicated cases or in rare cases, is significant. Courage also extends to committing oneself to a final diagnosis as one participant explains:

> *Sometimes people [anatomical pathologists][60] refrain from committing to a diagnosis if it's a challenging case. Sometimes you don't have a choice, sometimes you can't commit, but I think there is room in pathology, sometimes you must take the step; commit; stick out your neck. It is certainly not without risk, and I don't advocate becoming a cowboy, but I think we need a little bit more of that in pathology* (anonymous quote - study participant).

Furthermore, courage is important in admitting that a final diagnosis may not be achievable in some cases, based on the available data. Courage is also important in admitting that there may be certain circumstances in which the anatomical pathologist needs to seek assistance or a second opinion from a colleague. Lastly, courage is essential in admitting mistakes in the pathological diagnostic process.

Humanity

The third broad virtue of humanity reflects "interpersonal strengths that involve tending and befriending others" (Peterson and Seligman, 2004: 29). The character traits included in this rubric are listed below.

- Kindness: doing favours and good deeds for others
- Love: valuing close relations with others
- Social intelligence: being aware of the motives and feelings of self and others (Peterson and Seligman, 2004: 29).

Most of the participants in this study considered that the character traits that fall under the rubric of humanity are not essential in the routine practice of anatomical pathology. Only one of the participants chose love as their top-five traits for an ideal anatomical pathologist, two participants considered that kindness is an important trait while three participants chose social intelligence. This is a meaningful outcome which illustrates that the virtues in the practice of anatomical pathology are indeed different than those in clinical disciplines in which there is a direct contact with the patient. For instance, in an empirical study performed by Kotzee, Ignatowicz and Thomas, (2017)[61] the empirical data showed that the virtue of kindness and

[60] My addition in brackets.
[61] The study explores the views of medical doctors and medical students regarding the character traits that they perceive as important in clinical medicine.

social intelligence emerged as essential professional virtues for a good doctor. This is an expected outcome since medical practice is characterised first and foremost by the role-relationship with the patient in which kindness or compassion and social intelligence represent the characteristic features within these role-relationships.

However, given the lack of a direct relationship in the practice of anatomical pathology, it is expected that the virtue of humanity would not feature as vigorously as in those practices that are characterised by this direct relationship. One participant in this study made the following observation when engaging with the character traits under the rubric of humanity and temperance:

> *I can see that a good deal of these [character traits][62] have to do with the doctor patient interaction, and in that sphere, I would circle a different set of values. Here [in anatomical pathology][63] we don't have that aspect so our practice of medicine is much more specific and colder if you will because it is removed from the patient and in fact some of these characteristics will actually disadvantage you. If you feel sorry for the patient you might think that you know, lets downplay the atypia maybe it's not malignant because I feel sorry for the patient and that's got no role in what we do every day. You look at the slide and if it looks malignant, it is malignant* (anonymous quote - study participant).

Justice

Under the broad virtue of justice are those character traits that are "civic in nature and that underlie healthy community life" (Peterson and Seligman, 2004: 37). The three specific character traits that are characteristic of the virtue of justice are listed in bulleted form below:

- Fairness: treating all people the same according to notions of fairness and justice
- Leadership: organising group activities and seeing that they happen
- Teamwork: working well as member of a group or team (Peterson and Seligman, 2004: 29).

[62] My addition in brackets.
[63] My addition in brackets.

From the above character traits, teamwork was considered by twelve of the participants to be an important trait for the anatomical pathologist to possess and exercise in the practice. Teamwork as a character trait signifies "identification with and sense of obligation to a common good that includes oneself but stretches beyond one's personal interests to include the groups of which one is a member" (Peterson and Seligman, 2004: 375). Individuals who have developed this character trait are believed to:

> Have a sense of duty to the group in question and pull their own weight as group members, not because external circumstances force them but because they regard it as what a group member should do (Peterson and Seligman, 2004: 357).

Teamwork is a character trait that "is morally valued, given that it involves setting aside one's own glory to help the group" (Peterson and Seligman, 2004: 358). A characteristic of modern healthcare provision, particularly in the context of personalised medicine, is for healthcare practitioners to collaborate from different disciplines and combine their individual skills, knowledge, and strengths in order to achieve an understanding of complex phenomena related to the disease from which the patient suffers.

Going back to the unusual placement of the practice of anatomical pathology in the chain of healthcare provision and the dependence on the clinical colleagues in relating relevant facts about the patient, I show how teamwork has considerable value in the practice. The relationship between the anatomical pathologist and treating clinician, which I have shown throughout this thesis to be a vital component inherent of modern anatomical pathology practice, is a form of collaboration or teamwork. This collaboration is reciprocal; collaboration from the clinician is expressed in the form of information sharing about the patient while collaboration on the part of the anatomical pathologist is expressed in terms of the communication of the pathological diagnosis in a way that furthers the ability of the clinician to select appropriate treatment. In this way, the anatomical pathologist and the treating clinician collaborate as a team to achieve the common *telos* of benefiting the patient.

This is a special type of collaboration as the stakeholders work in unison to accurately diagnose the disease, which can be considered a type of pursuit of diagnostic truth in which knowledge regarding the disease process that the patient suffers from is pursued. This in turn furthers the management of the patient and contributes to the well-being of the patient in the form of beneficial treatment. This type of collaboration is considered by Kotsonis as an "intellectual collaboration aiming at epistemic ends" (Kotsonis, 2021: 5). Those that are positively

motivated to engage successfully in intellectual collaborations develop a character trait of "epistemic collaborativeness" which Kotsonis (2021: 6) defines as:

> An epistemically valuable character trait characterized by the disposition to pursue intellectual collaborative activities (when appropriate) out of a desire for epistemic goods and the ability to engage in such activities skilfully.

The analysis of the findings in this study suggests that the virtues which aid anatomical pathologists to become good collaborators are possible candidates that will help anatomical pathologists to serve the immediate ends of the practice adequately. While I analyse concept of collaboration in greater detail later in chapter six, it is noteworthy to point out that being a good collaborator presupposes the possession of other intellectual virtues, such as open-mindedness, love of learning and intellectual courage (Kotsonis, 2021). Most of these virtues have been identified as core character traits for a good anatomical pathologist by the participants in the study.

Temperance

The next broad virtue is that of temperance which refers to "strengths that protect against excess" (Peterson and Seligman, 2004; 30). The character traits included in this rubric are listed below.

- Forgiveness: forgiving those who have done wrong
- Modesty: letting one's accomplishments speak for themselves
- Prudence: being careful about one's choices; not saying or doing things that might later be regretted
- Self-regulation: regulating what one feels and does (Peterson and Seligman, 2004: 30).

Most of the participants chose the virtue of prudence from this broad virtue category. One participant also considered that humility should be added to the character trait of modesty. The analysis of the data of the study reveals that six of the participants in this study selected the character trait of modesty as their top-five character traits of an ideal anatomical pathologist. Those who possess the character trait of modesty "let their accomplishments speak for themselves, do not seek the spotlight, acknowledge mistakes and imperfections" (Peterson and Seligman, 2004: 435). Furthermore, two participants selected prudence and two participants selected self-regulation from this category.

Transcendence

The final broad virtue in the list of twenty-four-character strengths included in the Values in Action of Strengths (VIA-IS) is transcendence which refers to the "strengths that forge connections to the larger universe and provide meaning" (Peterson and Seligman, 2004: 30). There are five specific character traits that fall under the virtue of transcendence which are listed in bulleted form below.

- Appreciation of beauty and excellence: noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life
- Gratitude: being aware of and thankful for the good things that happen
- Hope: expecting the best and working to achieve it
- Humour: liking to laugh and tease; bringing smiles to other people
- Spirituality: having coherent beliefs about the higher purpose and meaning of life (Peterson and Seligman, 2004: 30).

While some of the participants in this study commented that some of the character traits under this broad virtue are significant in their personal lives, they believed these were not significance enough in the practice of modern anatomical pathology to select any of these traits as their top character traits required for the ideal anatomical pathologist.

The table below represents a summary of the virtues chosen by the participants in this study as those that an ideal anatomical pathologist would have:

Table 1: Character traits chosen by participants and categories of core virtues

Character traits chosen by participants from twenty-four-character strengths from the Values in Action Inventory of Strengths	**Categories of core virtues** from twenty-four-character strengths from the Values in Action Inventory of Strengths
• Open mindedness • Curiosity • Love of learning	**(1) Wisdom and knowledge**
• Authenticity • Persistence	**(2) Courage**
• Teamwork	**(3) Justice**

The column on the left of the table depicts the character traits which the participants in the study considered valuable for an ideal anatomical pathologist to have and the column on the right depicts the categories of broad virtues corresponding to the character traits chosen by the participants.

A noteworthy aspect arising from the empirical data of this study which is not reflected in current ethics literature is that the main virtue categories which have emerged strongly from

the empirical component are those of wisdom and knowledge, followed by courage and justice. If we compare the virtues identified by the empirical component of this study with those that Stempsey proposes (which are honesty, benevolence, prudence, consistency, sensitivity, and courage), we can observe the character traits which characterise the broad virtue of wisdom and knowledge do not feature as strongly in Stempsey's list of virtues. Conversely, some of the virtues that he proposes under the category of humanity, contrast with the empirical findings in this thesis in which virtues of humanities do not feature as essential in the practice.

More specifically, from the virtue of wisdom and knowledge, the character traits of open mindedness, love of learning and curiosity emerged as strong contenders for an ideal anatomical pathologist by the participants in this study. Under the virtue of courage, the participants in this study expressed strong views regarding the character trait of authenticity which they believe is of fundamental value in pathology practice. Given that the pathological diagnosis forms the foundation on which most other treatment decision will be made, any type of misrepresentation in respect to this foundational starting point would negatively impact the well-being of the patient. From the virtue of justice, participants expressed that teamwork is something that is often overlooked in the practice but is important for a good anatomical pathologist. Earlier, I argued that teamwork in the form of collaboration is vital given the role-relationships specific to the practice and given the unique placement of the practice. Indeed, collaboration is essential in individual patient care in which the pathologist collaborates with the treating clinician and possibly with other pathologists in search for diagnostic truth. Finally, the virtues of humanity and transcendence, respectively, were underrepresented in the findings of this study, with participants expressing that while these virtues might play a significant role in their personal lives, they did not consider that these virtues were of consequence in their role as anatomical pathologists. In chapter seven of this thesis, I show how the empirical data in this study informs the identification of the professional virtues which are designated as important in the framework that I propose as a way of advancing the immediate and ultimate ends of the practice.

Having identified the virtues which have emerged from the empirical component of this study, I move on to explore the final objective of the empirical component which is the identification of ethical issues which may arise due to the introduction of emerging molecular techniques including biomarkers.

6.3.4 Ethical issues in the use of emerging molecular and genetic techniques

Previously, in chapter two, I discussed how introduction of novel diagnostic techniques, such as biomarkers, are improving the capability of the anatomical pathologist in diagnosing the disease and offering a prognosis. These biomarkers further assist in risk stratification and screening for certain diseases and monitoring the treatment outcomes of the patient, thereby facilitating a more comprehensive form of patient care. Despite their benefits, there are several ethical aspects relating to the use of biomarkers which warrant further exploration. This represented the fourth objective which is to identify ethical issues that may have resulted from the introduction of newly emerging molecular and genetic techniques, including biomarkers, to the routine practice of anatomical pathology. The ethical issues related by the participants in this study can be summarised as issues of complexity, uncertainty, unavailability and costs of biomarkers which are similar to those discussed in the literature, namely, issues of "complexity, uncertainty and quality in biomarker research" (Blanchard, 2016: 767).

Regarding the use of biomarkers in routine practice, most participants indicated that they are currently very costly to utilise and sometimes may be unavailable, thus raising issues of justice in the use of biomarkers.

Participants in this study also revealed that there are considerable limitations and drawbacks in the use of biomarkers which might only come to the fore over time, and one needs to be prudent in their use and make sure that they are always up to date with new developments in the field. Participants in this study also mentioned that keeping up to date represents a difficult task as new biomarkers are constantly flooding the market, often being initially marketed as very specific and powerful markers for specific diseases. However, participants noted that this data often changes as further research reveals that the biomarker is not as specific as initially believed and might be identified in other disease entities as explained by this participant:

> *I think one of the biggest challenges that we have is that people publish results and say this is a magical marker for a certain tumour, and then five years down the line they say sorry, it also stains other things. So, I think we're very sceptical, there are a great number of immuno's on the market, the problem is that you can't keep up with all of them* (anonymous quote - study participant).

A couple of participants indicated that ancillary testing techniques are becoming a more and more powerful diagnostic tool, particularly genetic testing which is becoming more

commonly used in pathological diagnosis. These powerful genetic testing techniques that have the potential to analyse big volumes of genome sequencing may bring to light certain predispositions for diseases in the genetic makeup of the patient which were not part of the initial investigation. This may have implications for the patients and at times for their descendants which bring about issues of disclosure of these sensitive and potentially relevant data, such as clinically significant unsolicited findings.

Lastly, in terms of diagnosis one of the participants drew attention to the complexity and the expectation in the modern era of diagnosis to make use of the latest biomarker available in the field as part of validity claims. The participant mentions that:

> *Now we have so many markers so it's a lot more complicated, but you can't practice pathology in 2018 without the markers. People will question you, why did you not stain this tumour? It's definitely more difficult, its broader, its more challenging, and it doesn't get easier* (anonymous quote - study participant).

6.4 Conclusion

The focus of this chapter was on the empirical component of this thesis. My aim in the empirical component was to gain insight into the experiences, beliefs, and views of anatomical pathologists currently in practice as a way of informing the characterisation of the immediate ends of the practice and role-virtues specific to the practice.

After providing a detailed description of the methodology used in the study, I presented an in-depth representation of the empirical findings which offered insight into the routine practice of anatomical pathology, the developments in the practice and challenges faced in modern diagnostic service provision which are not apparent in current ethics literature. Furthermore, the empirical component offered insight from the perspective of those in the practice who related their views on the role of the anatomical pathologist in the healthcare team, the goals that anatomical pathology aims to achieve and the character traits which a good anatomical pathologist would have. These perspectives inform the virtue ethics framework that I aim to develop in this thesis.

A few interesting themes emerged from the empirical component of the study. The first is in respect to the goals of the practice of modern anatomical pathology which are viewed by those in the practice as serving through the pathological diagnostic report (which constitutes the

diagnosis) in guiding the treating clinician in the further management of the patient. Participants in this study revealed that there are various elements which constitute the pathological diagnosis. These are, a *confirmatory element* which is important in confirming that the right tissue sample has been submitted for diagnosis as well as confirming the intra-operative diagnosis, in the form of a frozen section; *a predictive element* - prognosing whether the disease is likely to respond to the treatment; *monitoring element*– monitoring treatment outcomes in terms of the response to various treatments. Furthermore, the participants ascribed a further *preventative element* to the pathological diagnosis in the form of early detection of disease (particularly malignant disease) through screening programmes. Finally, some of the participants also designated a research goal to the practice. These findings are significant in informing the immediate ends of the practice of anatomical pathology within the virtue ethics framework proposed in this thesis.

The second significant theme arising from the study which is not explicit in the ethics literature pertains to the role of the anatomical pathologist within the healthcare team. The analysis of the findings in this study reveals that those in the practice of anatomical pathology view their role in the healthcare team as essential and fundamentally rooted in the diagnosis of the disease by means of which they support and guide the treating clinician in the further management of the patient. This finding is valuable in informing the role-relationship in the role-centred virtue framework proposed in this thesis.

Regarding the identification of professional virtues, a noteworthy finding arising from the empirical data of this study which feature minimally in Stempsey's list of virtues for pathology practice is represented the broad category virtue of *wisdom and knowledge*. From this broad category, the character traits of love of learning, open-mindedness and curiosity were identified by the participants in this study as being important for the ideal anatomical pathologist. From the broad category of courage, the participants considered that character trait of authenticity is indispensable for the anatomical pathologist, followed by the character trait of persistence. Lastly, the participants considered that teamwork was another significant character trait that anatomical pathologists should possess. Worth noting from the analysis of the empirical data is that, contrasting the virtues suggested by Stempsey, the participants in this study did not consider that the character traits under the broad virtue of humanity, such as benevolence and sensitivity, were as relevant to their practice as they are to the clinical disciplines. This is a meaningful outcome which illustrates that the professional virtues required in the practice of anatomical pathology are indeed different than those in clinical disciplines in which there is a

direct contact with the patient. The last theme that emerged from the analysis of the empirical relates to issues encountered in the use of biomarkers in the pathological diagnosis. The issues identified by the participants in the study can be summarised as follows, the complexities surrounding the correct application of biomarkers, the inaccessibility of biomarkers and the cost of biomarkers which bring to light issues of justice in their use. Furthermore, issues of confidentiality and findings unrelated to the initial diagnosis were identified by the participants in the study, these being well represented in ethics literature.

Having presented the various noteworthy themes that emerged from the empirical component of the study, the remaining pieces of the puzzle are as follows; to incorporate the empirical findings of this thesis into a framework for modern anatomical pathology practice that is both cogent and action-guiding and to discuss the practical implications from the resultant empirically informed virtue ethics framework.

CHAPTER 7: AN EMPIRICALLY INFORMED VIRTUE ETHICS FRAMEWORK FOR MODERN ANATOMICAL PATHOLOGY

7.1 Introduction

In the previous chapter, I provided an in-depth representation of the empirical findings in this thesis which offered an understanding of how those in the practice of modern anatomical pathology view their role in the healthcare team, the goals that anatomical pathology aims to achieve, and the character traits expected from an ideal anatomical pathologist.

Building upon that understanding, my first task in this chapter is to interpret the most pertinent themes identified in the data from the empirical component of chapter six with the noteworthy virtue elements previously identified in chapter five and construct the proposed virtue ethics framework for modern anatomical pathology. My second task in this chapter is to discuss the practical implications from the resultant empirically informed virtue ethics framework. The practical implications relate to guiding the ethical decision-making process in modern anatomical pathology practice, motivating the development of excellence in character traits for those involved in the practice as well as moral training of anatomical pathologists. My third and final task is to assess ethical issues unique to routine modern anatomical pathology practice in light of virtue framework developed in this thesis.

The starting point in the construct of the empirically informed virtue ethics framework is the interpretation of the empirical findings relating to the goals of anatomical pathology practice to inform the immediate ends of the practice. I accomplish this in section 7.2 of this chapter. I show how in the proposed teleological framework, anatomical pathology practice is characterised by specific and immediate ends, the achievement of which supports the attainment of the *telos* of the practice. This *telos* is the good of the patient as designated by Pellegrino and as shared with all other healthcare disciplines. I further argue that identifying the specific and immediate ends of the practice is significant in guiding the activities in the practice by enabling the identification of the distinct ethical responsibilities and professional virtues characteristic to the practice. To this end, guided by the empirical findings, I claim that the immediate ends of the practice concern both individual patients as well as communities of patients that the practice of anatomical pathology serves. With respect to individual patients, the immediate end of the practice aims at guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring

treatment outcomes. Relating to communities of patients, the immediate end of the practice aims at distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision and prevention of disease in communities.

Following the establishment of the immediate ends of the practice, in section 7.3, I evaluate the empirical findings related to the role of the anatomical pathologist within the healthcare team based on the elements of the proposed virtue ethics framework. I show how in the proposed framework, the role-specific responsibilities are with the treating clinician (directly) and with the patient (indirectly). In this role, effective *collaboration* in the anatomical pathologist-clinician relationship, enables the clinician (by means of the pathological diagnosis) to provide the most beneficial treatment for the patient. In this way effective collaboration in the relationship, enables anatomical pathologists to meet the immediate goals of the practice and further its *telos*.

Designating the professional virtues distinctive to modern anatomical pathology practice is the focus of section 7.4 of this chapter. To this end, an evaluation of the various virtues identified by the participants in this study find expression in a teleological framework and provide justification for the identification of the set of virtues that allow for good *collaboration* within the anatomical pathologist-clinician relationship as well as during their interaction with other colleagues. I argue that the development and exercise of these identified virtues helps anatomical pathologists achieve the internal goods of the practice and serve the immediate ends of the practice adequately, thereby advancing the *telos* of the practice. Good collaboration presupposes the possession and exercise of the intellectual virtues of *love of learning, open-mindedness, curiosity,* and *intellectual courage* as well as the moral virtues of *authenticity* and *persistence*. These virtues help anatomical pathologists in responding virtuously, which makes them good within the specific role that they occupy. Virtuous responses or actions, within the specific roles, are those that enable the establishment of a meticulous diagnosis that is communicated in such a way as to best enable and aid the treating clinician in the further management of the individual patient which will benefit the patient while distributing knowledge of the disease process for the improvement of healthcare provision.

Then in section 7.5, I discuss the theoretical and practical significance of the resultant virtue ethics framework. I show how in the approach presented in this framework, anatomical pathology is viewed as a human endeavour and is afforded a more human dimension. Professional practice is understood and evaluated as a human task comprising various cognitive

and collaborative activities which focus both on technical excellence as well as on personal excellence through the development of character excellence. Furthermore, anatomical pathology practice is viewed in terms of a specific role within the practice with well-defined intermediate ends. A significant practical implication resulting from this thesis relates to the recommendation for moral education for specialist training in anatomical pathology practice with the view of shaping the early professional identity of the anatomical pathology registrars and encouraging the development of the various virtues which enables anatomical pathologists to become effective *collaborators*.

Finally, in section 7.6, I assess ethical issues in modern anatomical pathology in light of the virtue ethics framework proposed in this thesis and show how the framework provides a helpful and practical guide in evaluating and solving ethical dilemmas.

I begin in the section below with establishing the immediate ends of the practice of modern anatomical pathology informed by the empirical findings described in the previous chapter.

7.2 The immediate ends of the practice of anatomical pathology

An important starting point in the construct of the empirically informed virtue ethics framework is the interpretation of the empirical finding regarding the goals of anatomical pathology practice to inform the immediate ends of the practice. If we recall in chapter five, I critiqued Stempsey's account in which the immediate ends of the practice are not clearly identified. To this end, I argued that in the absence of clearly established immediate ends, the identification of the professional virtues is likely to be misdirected and not relevant to the (current) ends of the practice and has the potential to cause conflict between the ethical duties of the pathologist and those of the treating clinician.

To remedy this shortcoming, in the proposed teleological framework, anatomical pathology practice is characterized by specific and immediate ends. These immediate ends support the attainment of the *telos* of the practice which is the good of the patient in relation to health, as designated by Pellegrino, and as shared with all other healthcare disciplines. The importance of identifying these immediate ends of the practice lie in them being specific enough to be able to offer guidance, given that the virtues and duties arise from the ends of the practice.

Identifying the immediate ends of the practice and the role-specific responsibility towards the treating clinician in modern anatomical pathology represents a key element for the kind of ethical framework that I propose in this thesis. Accordingly, the framework that I propose is

teleological as it relates the virtues of the practice of anatomical pathology to the current and immediate ends of the practice. It is these immediate ends that provide justification for the designation of professional virtues in the practice of modern anatomical pathology. The empirical component informs the normative discussion regarding the current goals of modern anatomical pathology practice and provides an initial perspective on the types of character traits which are valuable for *this* practice. From the analysis of the empirical findings of this study within a teleological virtue-ethics background, I propose that the immediate ends of modern anatomical pathology practice are:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**
- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities.**

These immediate ends of modern anatomical pathology practice are specific enough to adequately encompass and incorporate the current scope of the practice and in this way, be relevant to it. Furthermore, these immediate ends allow for the identification of the ethical responsibilities towards the treating clinician and patient respectively, while still being in synchrony with the *telos* of practice and clinical healthcare practice, that of contributing to the overall benefit and health of the patient. Redirecting the focus of the immediate ends of anatomical pathology practice towards *guiding the treating clinician* as opposed to the general well-being of the patient is significant as it prevents any overlap or potential conflict between the responsibilities of the anatomical pathologist and the treating clinician, respectively. Lastly, these immediate ends are significant as they reveal an important distinction between the role-specific responsibilities in modern anatomical pathology practice as opposed to the role-specific responsibilities in clinical healthcare practice. That is to say that it is the relationship with the clinician that is central to the identity and success of modern anatomical pathology practice. Once the anatomical-pathologist and treating clinician enter into the relationship, both jointly aim to collaborate for the good of the patient from their respective distinct roles. In the remainder of this section, I discuss each of the immediate ends in further detail.

The first immediate end of modern anatomical pathology practice that I propose, is aimed at benefiting the individual patients served by the anatomical pathologist in routine diagnostic pathology. This first immediate end is:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**

This immediate end has two important aspects. The first aspect, which is guiding the treating clinician (by means of the pathological diagnosis), indicates that anatomical pathologists serve their patients indirectly via the clinician, by guiding the treating clinician by means of a pathological diagnosis. This is significant in acknowledging the unique position from which the pathological diagnostic process is achieved. The second aspect, which is the selection of beneficial treatment for patients and monitoring treatment outcomes, reveals that the anatomical pathologists should guide the treating clinician in such a way that the treatment is beneficial for patients. This aspect is significant for two reasons. Firstly, it correlates with the communicative domain and medical conduct domain which are part and parcel of the pathological diagnostic process. As previously discussed in chapter two, a crucial aspect of the medical conduct domain is whether the communication of the diagnosis is unambiguous and makes clear the diagnosis, as well as the expected conduct derived from the diagnosis (Pena and Andrade-Filho, 2009). The consequences of the diagnosis must be well understood, and this implies that the final diagnosis is communicated in a manner that will benefit the further management of the patient (Pena and Andrade-Filho, 2009). Secondly, it is significant to make specific mention that it is the selection of beneficial treatment for the patient that is pursued since "this is how physicians have understood their craft ever since the introduction of the Hippocratic Oath" (Ben-Moshe, 2019: 4461). Within the first immediate end of modern anatomical pathology practice, several elements are included in the pathological diagnosis, including a predictive prognosis, preventative treatment as well as the intra-operative diagnosis. Finally, monitoring treatment outcomes entails an ongoing relationship with the clinician in those cases that may require a pathological follow-up.

The second immediate end of modern anatomical pathology practice that I propose is:

- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision and prevention of disease in communities.**

The second immediate end is aimed at benefiting communities through distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities. Preventative diagnosis falls under the collective benefit to communities in the form of early detection of cancer through screening programmes as part of outreach community programmes.

It follows that, it is by means of the realisation of these intermediate ends that modern anatomical pathology practice contributes to the common *telos* of healthcare, which is the good of the patient.

In the teleological virtue ethics framework that I propose in this thesis, the identification of the immediate ends of the practice represents an important starting point as these immediate ends assist in determining the role-specific responsibilities and virtues needed to further these ends, which I discuss subsequently in the sections below.

7.3 Role-specific responsibilities of anatomical pathologists

As outlined in chapter five, the theoretical component aims to establish the immediate ends of the practice of modern anatomical pathology. In light of these ends, the role-specific responsibilities of anatomical pathologists can be clarified together with the virtues that allow someone to be a good anatomical pathologist. In the proposed virtue ethics framework, virtues are central, and the principles of right action are derivative from the virtues. As previously shown in chapter two, anatomical pathology practice functions within the blurred lines at the level of clinico-pathological correlation, which places the practice somewhere between laboratory medicine and clinical medicine, thus making the role of the anatomical pathologist in the healthcare team uncertain. It is thus important to first and foremost establish the current role that the anatomical pathologist plays within the chain of healthcare provision and explore the significance of the relationship with the treating clinician.

To this end, following the analysis of the views and opinions of anatomical pathologists currently in practice, in chapter six, this role can be summarised in the following manner. Those in the practice of anatomical pathology view their role as fundamentally rooted in the diagnosis of the disease which is the compass point that has an influence on all aspects of healthcare provision which follow from the point of diagnosis. Apart from the diagnosis, a significant role in current anatomical pathology practice is a supportive one for the clinician in assisting them to best incorporate the knowledge and understanding gained from the pathological diagnostic process in the treatment of the patient.

Secondly, the analysis of the views and opinions of anatomical pathologists currently in practice, in chapter six, highlights that the relationship with the clinician represents an essential component of the practice which depends on collaboration and adequate information sharing

in the form of clinical input from the clinician who represent the ‘eyes and ears’ of the anatomical pathologist.

Hence, the role-specific responsibility of the anatomical pathologist is primarily and directly with the treating clinician and indirectly with the patient. It is by means of *collaboration* with the clinician that anatomical pathologists provide benefit to the patients. The anatomical pathologist-clinician-patient relationships, as I have previously shown in chapter five, represents one of the internal goods in the practice of modern anatomical pathology, together with excellence in diagnostic skills.

Within this role, the ethical responsibility of the anatomical pathologist can now be defined as that which enables the fulfilment of the immediate ends of the practice and furthers the *telos* of healthcare practice. To be a good anatomical pathologist then, entails excellence in diagnostic skills coupled with the development and exercise of a set of virtues which allow for an effective relationship- of *collaboration*- with the clinician and other colleagues. Through the development and exercise of these virtues, anatomical pathologists become good *collaborators,* that guide the treating clinician in the selection of beneficial treatment and distribute knowledge of the disease process thereby benefiting the patient, which is the general *telos* which it shares with other healthcare practices.

The identification of these specific professional virtues is the focus of the next section below.

7.4 Professional virtues for modern anatomical pathology practice

Given that the aim of this virtue ethics framework is to serve as a practical guide to ethical practice and to assist anatomical pathologists in dealing with ethical issues which may arise in their routine practice, I aim to designate the distinct character traits which are needed to advance the immediate ends of the practice, and which can assist in ethical decision-making.

Although the identification of virtues characteristic for the practice of modern anatomical pathology practice is a significant objective in this thesis, it is important to note that I take a different approach than most virtue accounts which offer a list of virtues that are designated as important in a specific practice, for example, Stempsey’s and Pellegrinos’s list of virtues. In the kind of teleological virtue ethics framework that I propose, the *telos* of the practice of anatomical pathology is the good of the patient which is a shared good with all the other various branches of healthcare, as Pellegrino advocates. However, I further characterise the more immediate ends of the practice of anatomical pathology informed by the empirical component

in this thesis. It is these immediate ends that provide justification for the professional virtues that are characteristic of the practice of modern anatomical pathology. My objective in respect to professional virtues is thus to identify those virtues that are valuable to the practice and are distinguishable from the other branches of healthcare disciplines which lead to the attainment of the immediate ends of the practice previously characterised. These characteristic virtues tend to the immediate ends of the practice; these practice specific professional virtues, in conjunction with the well-established professional virtues required for all branches of healthcare (for example, compassion, justice, self-effacement, and so on), will ensure ethical practice in modern anatomical pathology.

In the remainder of this section, I argue that, given the unique placement of the practice of anatomical pathology and the special role-responsibilities directly with the clinician and indirectly with the patient, a set of virtues which enables good *collaboration* are required (at least to a minimal extent) in order to support the internal goods of the practice and to achieve its immediate ends and further its *telos*. According to Alkis Kotsonis, epistemic collaborativeness is an intellectual virtue[64] that is required by those "truth-seeking agents" involved in the process of collaboration (Kotsonis, 2021: 3). He describes the process of collaboration as "involving two or more agents working together in order to achieve a common goal (or set of goals)" (Kotsonis, 2021: 3). He gives an example of collaboration as:

> A case of scientists working together in a lab in order to study a certain phenomenon while having as a (common) end goal the desire to understand the phenomenon in question (Kotsonis, 2021: 7).

He is of the view that the "the virtue of epistemic collaborativeness is characterised by this strong drive for epistemic goods" (Kotsonis, 2021: 6). Furthermore, he notes that the individual "who possesses the trait of epistemic collaborativeness is motivated to enter into epistemic collaborations with others" (Kotsonis, 2021: 6). He also considers that "good collaborators carry their own weight, make valuable contributions, treat others with respect, are intellectually courageous and open minded" (Kotsonis, 2021: 8-9). This virtue then demands an acquired and internal motivation to partake in collaboration with other members of the team in the search for epistemic ends of truth and knowledge (Kotsonis, 2021). Within the framework that I

[64] Kotsonis takes a responsibilist view of virtue epistemology pertaining to intellectual virtues according to which these virtues are defined as "those epistemic character traits that characterize a responsible knower" following on Aristotelian notions of moral excellence (Kotsonis, 2021: 2).

propose, the pathological diagnostic process is viewed as a truth-seeking exercise and the epistemic end is the truth regarding the disease process (a type of diagnostic truth) and the knowledge gained from the discovery of the cause of the disease, type of the disease, nature of the disease and so on.

Interestingly, he shows how the virtue of collaborativeness is linked to other virtues (both intellectual virtues and moral virtues) and that it represents an "overarching virtue as it presupposes certain other intellectual virtues although it remains indistinguishable from them" (Kotsonis, 2021: 1). The link between virtues can be divided into those that are logically connected and those that are causally necessary (Kotsonis, 2021; Zagzebski, 1996). Zagzebski offers the following example to illustrate this connection:

> The virtue of honesty logically entails having intellectual virtues. This is because an honest person is careful with the truth. She respects it and does her best to find it out, to preserve it, and to communicate it in a way that permits the hearer to believe the truth justifiably and with understanding. The moral virtues of patience and perseverance are causally necessary for the possession of intellectual virtues. One cannot possibly possess intellectual virtues if one is not patient and does not persevere in their efforts to acquire epistemic goods such as truth and knowledge (Zagzebski, 1996: 158).

Following on Zagzebki's logical correlation between intellectual virtues, Kotsonis considers that the virtue of collaborativeness presupposes other intellectual virtues, namely, *open-mindedness* and *intellectual courage* (Kotsonis, 2021; Zagzebski, 1996). Otherwise stated, the virtues of intellectual courage and open-mindedness are fundamentally required for the development and the full expression of a good collaborator (Kotsonis, 2021). He argues that an individual who is adequately motivated to collaborate with her colleagues but lacks, for example, the virtue of open-mindedness which means that she is not prepared to engage with contrary opinions from her colleagues, cannot be considered to be a good collaborator (Kotsonis, 2021). Such an individual would not be an effective collaborator since she lacks the ability to take other opinions into consideration and learn from the other stakeholders in the team (Kotsonis, 2021). He further considers that:

> It is safe to assume that (at least in the majority of cases) a person lacking the character trait of open-mindedness is not motivated to enter into epistemic collaboration since she is not interested in exchanging ideas with others (Kotsonis, 2021: 11).

In a similar manner, those individuals who have not developed the virtue of intellectual courage would not be good collaborators; this is because of the absence of courage to express their own ideas and beliefs and assert their viewpoints (Kotsonis, 2021). Kotsonis further has this to say about the link between intellectual courage and the virtue of collaborativeness:

> Consider, for example, the case of an agent who engages in epistemic collaboration but lacks the courage to share with her collaborators that she has strong evidence supporting the opposing view from the one they uphold. Such an agent does not possess the virtue of epistemic collaborativeness—her lack of courage does not allow her to collaborate with others (at least not meaningfully and competently) (Kotsonis, 2021: 11).

From his viewpoint, those who have developed the virtue of collaborativeness, become good collaborators and are also "reliably successful in recognizing with whom and when it is epistemically appropriate to pursue collaboration" (Kotsonis, 2021: 9).

At this point, it is noteworthy to mention that although Kotsonis makes the argument that epistemic collaboration is an overarching virtue, in the proposed virtue ethics framework, I take the view that there are a set of virtues that allow anatomical pathologists to become good *collaborators* (which represents one of the internal goods in the practice of modern anatomical pathology) without considering that collaboration is an overarching virtue. Nonetheless, I agree with the set of virtues that Kotsonis argues to be essential in becoming a good collaborator which I incorporate, amongst others, in the proposed virtue ethics framework.

Following on the logical association between intellectual virtues and moral virtues, I propose that, apart from open-mindedness and intellectual courage, a few other intellectual virtues and moral virtues are required in order to be a good collaborator in the context of the anatomical pathologist-clinician relationship. These are the intellectual virtues of *love of learning* and *curiosity*, as well as the moral virtues of *authenticity* and *persistence.* Conceivably an anatomical pathologist who does not possess the virtues of love of learning and curiosity cannot collaborate meaningfully since she is not internally motivated to gain new skills or new knowledge or improve her skills and knowledge. Furthermore, she would not be cognitively engaged in satisfying her curiosity or learning something new. Imagine an anatomical pathologist with little or no curiosity about the new developments in the field, whether a new classification or a novel tumour marker, or biomarker in the field of oncology; such an anatomical pathologist would not be able to collaborate in a way that is meaningful in providing a tailored diagnosis and prognosis. If we remember from chapter two, modern medicine

represents a rapidly developing field and the novel scientific discoveries made in various fields of medicine impact on the practice of anatomical pathology. As Parslow Adsay, Krasinskas and Roback (2017: 325) put it "the only constant in pathology is change…new diseases are discovered; new pathogens emerge; diagnostic criteria, expert opinions, and favourite systems of terminology remain forever in flux".

As a result, anatomical pathologists need to be internally motivated to cultivate the intellectual virtue of love of learning and curiosity (at least to a minimal extent) in order to constantly keep abreast of these new developments and incorporate them in their routine pathological diagnostic process and achieve the internal good of diagnostic excellence.

Similarly, I argue that the moral virtues of *authenticity* and *persistence* are a prerequisite for anatomical pathologists to become good collaborators. Imagine an anatomical pathologist who does not possess the virtue of authenticity and who does not present herself in a sincere way but consistently misrepresents the findings in the pathological diagnosis and does not take responsibility for her actions or mistakes. Such an anatomical pathologist would not be able to engage in dependable collaboration and would not be meaningfully engaged in the search for diagnostic truth. Furthermore, I have previously shown that the pathological diagnosis is the *sine qua non* of anatomical pathology practice. Following on the argument presented by Kotsonis, collaboration in the context of anatomical pathology is designated as a type of diagnostic truth-seeking activity. It follows that authenticity is a fundamental virtue in ensuring the accuracy of the diagnosis which forms the basis of all subsequent clinical decisions made for the patient. Furthermore, *persistence* in the search for diagnostic truths despite obstacles (which inadvertently arise in the process of pathological diagnosis), that is to say, not giving up easily, is also a requirement in order to become a good collaborator. An anatomical pathologist who does not possess the virtue of persistence would not be an effective collaborator as she would not be firm in her motivation to complete the various diagnostic tasks and persevere in her efforts to acquire diagnostic truths.

In the context of modern anatomical pathology, this type of collaboration can be considered a specialised form of *teamwork* with the various stakeholders in the team, most notably the anatomical pathologist and treating clinician (which sometimes can extent to collaborating with other healthcare providers and other pathologists). In such a collaboration, the anatomical pathologist and the clinician work together to achieve the common goal of the diagnostic truth

in the form of pathological diagnosis which I have previously shown is the *sine qua non* of anatomical pathology practice.

In this way, all the virtues identified by the participants in this study find expression in and provide justification for effective collaboration as significant in the interaction with clinicians and other colleagues which benefits individual patients and communities of patients.

On a final note, although not identified by the participants in this study, I argue that *intellectual courage,* as assigned by Kotsonis, is similarly required for a good collaborator in the context of anatomical pathology. This is because intellectual courage is needed for anatomical pathologists to defend the diagnosis, particularly in those cases of rare disease and complicated pathological presentations in certain disease entities, and in this way, advocate for patients through the treating clinician. Furthermore, intellectual courage is important in acknowledging those cases in which the anatomical pathologist may not be able to reach a final diagnosis. Lastly, anatomical pathologists require intellectual courage to concede when mistakes have been made and be willing to correct these mistakes and minimise the harm that these mistakes have on the patient or a community of patients.

Given the unique placement of the practice of anatomical pathology and the special role specific -responsibilities directly with the clinician and indirectly with the patient, these virtues will facilitate effective collaboration in the anatomical pathologist-clinician relationship; this in turn, aids the anatomical pathologist in serving both the immediate and the ultimate ends of the practice adequately from its characteristic position.

Lastly, I argue that information sharing is indispensable in ensuring adequate collaboration. Anatomical pathologists who are good collaborators are careful with the way in which they communicate the knowledge gained from the pathological diagnosis in a way that is intelligible and clear and are aware of the practical implications of the diagnosis, for which they admit responsibility. Furthermore, through effective collaboration, anatomical pathologists ensure that the clinical input from the clinician in the form of clinical information is sufficient in the search for diagnostic truth and in cases in which the information is lacking, pathologists develop methods of alerting the clinician to the harmful potential of the absence on clinical input.

Thus, the character traits of open-mindedness, curiosity, love of learning, intellectual courage, authenticity and persistence are important for anatomical pathologists, the development and exercise of which makes anatomical pathologists good collaborators within their unique

relationships and helps them to serve the immediate ends of the practice adequately. Otherwise stated, good collaboration in the practice of modern anatomical pathology, requires the exercise (at least to a minimal extent) of the virtues identified in this thesis.

In summary, the consolidation of the empirical component and theoretical component can be summarised as follows. Modern anatomical pathology is a practice characterised by internal goods specific to the practice, role-specific- responsibilities, well-defined immediate ends, and a clearly established *telos*. Anatomical pathologists are the practitioners whose role-responsibilities in the practice are directly with the treating clinician and indirectly with the patient. The internal goods specific to the practice are represented by the *collaboration* in the anatomical pathologist-clinician-patient relationship and excellence in diagnostic skills. The immediate ends of the practice of modern anatomical pathology are designated as:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**
- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities.**

The development and exercise of a set of virtues allows anatomical pathology practitioners to be good collaborators and achieve the internal goods of the practice, serve the immediate ends of the practice well, thereby advancing the *telos* of the practice. Becoming a good collaborator presupposes the possession of the intellectual virtues of *love of learning, open-mindedness, curiosity,* and *intellectual courage,* as well as the moral virtues of *authenticity* and *persistence*. These virtues require that anatomical pathologists are internally motivated to act in ways aimed at the establishment of a meticulous diagnosis that is communicated in such a way as to best enable and aid the treating clinician in the further management of the individual patient which will benefit the patient while distributing knowledge of the disease process for the improvement of healthcare provision.

To be a good anatomical pathologist then, requires the development of excellence in diagnostic skills coupled with a set of virtues which allow for an effective relationship- of *collaboration*-with the clinician. By means of effective collaboration, the anatomical pathologist can realise the ends and goods of anatomical pathology in particular, and the general *telos* of the wellbeing of the patient which it shares with other healthcare practices.

Lastly, given the issues of complexity, uncertainty, unavailability, and costs associated with the use of biomarkers in the pathological diagnosis, the virtues that underpin good collaboration, namely, the virtue of love of learning, open-mindedness, curiosity, and persistence, are helpful. These virtues assist anatomical pathologists in being motivated to stay current with the latest developments in the field, while being cognisant of the limitations and drawbacks of emerging biomarkers and ensuring that they are used in optimal ways to ensure just distribution and appropriate benefit for all patients.

7.5 The significance of the resultant virtue ethics framework

The virtue ethics framework that I propose in this thesis has both theoretical and practical significance which are sketched in the section below:

7.5.1 Theoretical significance

7.5.1.1 Anatomical pathology as a human endeavour

Given the significance of anatomical pathology practice in the chain of healthcare provision, coupled with the human dimension and unique relationships, the development of certain character traits and motivations are crucial in its success. Ethical activity in professional practice in anatomical pathology is acknowledged as a human endeavour as it is afforded a more human dimension. Professional practice is understood and evaluated as a human task comprising various cognitive and collaborative activities which focus both on excellence in technical skills and abilities, as well as on personal excellence in the development of character and internal motivations.

7.5.1.2 Anatomical pathology as a role-specific practice

Anatomical pathology practice is viewed in terms of role-specific virtues and well-established role within the healthcare team with distinct intermediate ends and a common *telos*. Within this role-centred practice, right action can be determined within a well-defined role-specific responsibility with the clinician and patient, respectively, in serving the immediate ends of the practice. An important resultant of this is the establishment of a well-defined role within the chain of healthcare provision, which has, until now, functioned within the blurred lines between clinical healthcare and laboratory healthcare. A good anatomical pathologist is one that has developed excellence in diagnostic skills coupled with a set of virtues which allow for an effective relationship- of *collaboration*- with the clinician. By means of effective collaboration, the anatomical pathologist can realise the distinct ends and goods of anatomical pathology in

particular, and the general *telos* of the wellbeing of the patient which it shares with other healthcare practices. These virtues are open-mindedness, curiosity, love of learning, intellectual courage, authenticity, and persistence.

7.5.2 Practical significance

The proposed framework accommodates the virtues unique to anatomical pathology as well as virtues designated as being important for healthcare practice in general. The framework also accommodates Beauchamp and Childress's principles of biomedical ethics, as a set of role-specific duties of anatomical pathologists which serve as helpful starting points in ethical deliberation in the practice of modern anatomical pathology. However, from the proposed virtue ethics framework, anatomical pathologists will understand that this set of duties is not sufficient for acting or responding in a way that is virtuous or right. The proposed virtue ethics framework further requires the development and exercise of certain professional virtues, coupled with wisdom and experience that will enable them to *collaborate* effectively in the team (whether for individual patient care or for distributing knowledge in the form of research), and will assist in negotiating disagreements with colleagues and clinicians and to advocate for the well-being of their patients.

On the virtue framework presented in this thesis, the development of professional virtues represents an "ongoing process of learning" (Annas, 2015:7). The identification of these professional virtues have implications for professional moral education (Kotsonis, 2021: 6). It is suggested that the teaching of virtues should be included as a component of training in the healthcare curriculum (Doukas, 2003; Pellegrino and Thomasma, 1993). This is because "good professional practice requires a set of personality traits that enable and motivate professionals to serve the end of their practice well" (Spielthenner, 2017: 24). The question than arises, how can these virtues be learned? The approach by most theorists that advance an Aristotelian virtue approach consider that virtues are developed through continuous exercise. In the traditional virtue ethics view, one can learn virtues "by practice and that the best practice is to follow a model of the virtuous person" (Pellegrino, 2002: 383). In the context of healthcare, this implies that "we need virtuous physicians as teachers" (Pellegrino, 2002: 383).

A full discussion of this topic would go beyond the scope of this thesis so I confine my discussion in this section to a brief overview of the contribution that virtue ethics may conceivably have in the formal training of anatomical pathology registrars and the moral training in the context of continued professional development. A significant practical

implication resulting from this thesis relates to the recommendation for moral education for specialist training in anatomical pathology practice with the view of shaping the early professional identity of the anatomical pathology registrars and encouraging the development of good collaborators. To this end, the teams under which anatomical pathologists train would be encouraged to expressly guide and support virtuous behaviours and offer support and guidance for those who lapse in displaying virtuous behaviour. Role-modelling the virtues of open-mindedness, curiosity, love of learning, intellectual courage, authenticity, and persistence in the interaction with clinicians and other colleagues could have a positive influence on character development of future anatomical pathologists.

Pellegrino considers that those responsible for teaching medical students "bear a heavy responsibility for the character traits that they model for their students and residents" (Pellegrino, 2002: 383). Oakley and Cocking in their virtue ethics inspired model for professionals consider that:

> It may be thought that part of being a good medical practitioner that one has internalized a conception of what the appropriate ends of medicine are, and one is disposed to treat one's patients in ways which are consistent with those ends (Oakley and Cocking, 2001: 23).

Applying this concept to the practice of anatomical pathology entails that a good anatomical pathologist has internalised certain values and ideals of excellence and is able to apply these in their routine practice.

7.6 Assessment of ethical issues in modern anatomical pathology in light of the virtue ethics framework developed

In this final section, I show how the virtue ethics framework proposed in this thesis provides a helpful guide in evaluating and resolving ethical issues encountered in the practice. If we recall in section 3.3. of chapter three, I presented two specific ethical issues encountered in the practice of anatomical pathology, given its unusual position in the chain of healthcare provision. In this remaining section, I assess these ethical issues in light of the framework developed in this thesis which highlights that virtue ethics is better suited to address issues specific to the practice than the principle-based approach.

Case-scenario 1, dealt with the receipt of a request form that accompanies the biopsy from the treating clinician of a few additional laboratory investigations which the clinician believes

would identify the cause of her patient's infection. Following the microscopic evaluation and the integration of the various clinico-pathological parameters of the case as part of the cognitive domain, the pathologist concludes that the specific investigations requested by her clinical colleague are not indicated in this particular case and that other investigations would be more beneficial in identifying the patient's infection and associated pathology. Despite consultation, the clinician insists on the initial laboratory investigations that she requested and considers that since she is responsible for the management of the patient, her request is justified. While the pathologist considers that other investigations are more suitable in identifying the pathology, she also wishes to maintain a good professional relationship with her clinical colleague which she knows is significant in benefiting the patient. The question posed in this scenario is whether the anatomical pathologist should concede to the demands of the clinician for the special investigations?

In the virtue ethics framework proposed in this thesis, a good anatomical pathologist is positively motivated to collaborate with the treating clinician in pursuit of diagnostic truths. If we recall, the development of the virtues of open-mindedness, curiosity, love of learning, intellectual courage, authenticity, and persistence, allows her to become an effective collaborator with the treating clinician which in turn guides the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes. Given that conceding to the demands of the clinician in this case derails the acquisition of diagnostic truth and does not facilitate the internal good of diagnostic excellence, the anatomical pathologist need not concede to the demands of the clinician. However, before making the final decision, part of being a good collaborator, pertinent to this scenario the virtue of *open mindedness* makes a demand on the anatomical pathologist to "search actively for evidence against one's favored beliefs, plans, or goals, and to weight such evidence fairly when it is available" (Peterson and Seligman, 2004: 144). This entails further communication to ascertain whether the treating clinician may have good reasons for her requests. Once such communication yields evidence that the additional stains are indeed not warranted in this case, the virtue of *intellectual courage* demands that the anatomical pathologist defend her final decision and communicate it in a manner that is conducive to the further collaboration with the treating clinician. Additionally, the virtue of *persistence* requires the anatomical pathologist in this case to continue discussing this matter with the clinician despite the opposition encountered, thereby ensuring that the ends of anatomical pathology practice are achieved.

Case scenario 2 can be summarised as follows. A pathology laboratory receives a needle biopsy of a lesion with minimal clinical information. The anatomical pathologist, in this case, is constrained in the clinico-pathological correlation in the absence of pertinent clinical information on this patient. For the pathologist to narrow down the various differential diagnoses, she requires specialised radiologic examinations to exclude certain pathologies and needs to request a panel of specialised laboratory techniques to facilitate the exclusion of cancers in the list of possible diagnoses. After viewing the radiological report and a further twelve microscopic stains at significant additional time and costs, a final diagnosis of a metastatic renal cell carcinoma is made. Targeted treatment commenced following the diagnosis. At a later stage, the anatomical pathologist discovers that this patient had a kidney removed recently. If this information was disclosed prior to the microscopic examination, the special examinations would have been focussed on the probability of metastatic kidney cancer rendering several extra investigations unnecessary.

The question which arises is whether the anatomical pathologist has an ethical duty to identify a potential for harm due to lack of clinical information and discuss this potential harm with the clinician (Baron, 1993).

Being a good collaborator entails that the anatomical pathologist is internally motivated to engage in collaboration with the clinician for the attainment of the diagnostic truth. Apart from the diagnostic truth, the collaboration with the clinician is one in which both jointly aim at the *telos* of healthcare, which is the good of the patient. In this scenario, the lack of information derails the good of the patient (even if only temporarily) and leads to unjustified spending of resources. Once such potential for harm is identified, the virtue of *authenticity* makes a firm demand on the anatomical pathologist to be truthful with the clinician and alert her to this potential for harm.

In the last part of this section, I assess the ethical issues identified by the participants in this study regarding the introduction of novel molecular techniques, including biomarkers, in light of the framework developed. The ethical issues identified were related to issues of complexity, uncertainty, unavailability, and costs of biomarkers.

In respect to the issues of complexity and uncertainty, the intellectual virtues of *open mindedness, curiosity, love of learning*, which are requisite for good collaboration, compels anatomical pathologists to be internally motivated as life-long learners who continually gain new perspectives on novel disease entities and emerging molecular techniques. Moreover, the

anatomical pathologist is internally motivated to keep up to date and continually enhance their knowledge of extended diagnostic criteria or amendments to indications of existing biomarkers. Given the ever-increasing complexity with the emerging molecular techniques remarked by some of the participants in this study which may, at times, be unmanageable and overwhelming, anatomical pathologists need to be positively motivated to enter into collaborations. These collaborations can be in the form of research or in multidisciplinary meetings with other pathologists and experts in various fields in her quest for updating her knowledge and for the improvement of healthcare provision to communities. Such collaborations serve to firstly, improve the diagnostic excellence of the anatomical pathologist and as such, further the internal goods of the practice while also achieving the other immediate end of the practice, which is distributing knowledge of the disease process.

Finally, in respect to incidental findings in the course of making use of powerful genetic testing techniques as part of the pathological diagnostic arsenal, which may bring to light certain predispositions for diseases in the genetic makeup of the patient. These incidental findings which were not part of the initial requested investigation may have implication for the patients and at times for their descendants. The question arises whether this sensitive and potentially relevant data should be disclosed to the patient via the treating clinician. The virtue of *authenticity* makes a strong demand on the anatomical pathologist to be truthful and present all the findings of the diagnostic investigation in a genuine way. Authenticity thus demands that the anatomical pathologist be honest with the treating clinician (and indirectly with the patient) regarding the incidental finding which has implications for the patient.

From the above assessment of ethical issues that arise in the context of anatomical pathology practice, we can conclude that the virtue ethics approach proposed in this thesis is cogent, nuanced, and helpful in ethical decision making.

7.7 Conclusion

My objective in this chapter was the construction of the empirically informed virtue ethics framework and the resultant practical implications thereof.

In pursuit of this objective, I began with the interpretation of the empirical findings related to the goals that anatomical pathology aims to achieve in order to inform the immediate ends of the practice. I argued that identifying the immediate ends of the practice represents a key element for the kind of ethical framework that I propose in this thesis which is teleological in

that it links the virtues of the practice of anatomical pathology to the current and immediate ends of the practice.

Modern anatomical pathology is an end-directed practice with internal goods specific to the practice, particular roles, well-defined immediate ends, and a clearly established *telos*. Anatomical pathologists are the practitioners whose role-relationships in the practice are directly with the treating clinician and indirectly with the patient. The internal goods specific to the practice are represented by the *collaboration in the anatomical pathologist-clinician-patient relationship* and *excellence in diagnostic skills*. The immediate ends of the practice of modern anatomical pathology are designated as:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**
- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities.**

I then evaluated the views and opinions of anatomical pathologists currently in practice in chapter six, that highlights that the relationship with the clinician represents an essential component of the practice which depends on collaboration and adequate information sharing in the form of clinical input from the clinician who represent the 'eyes and ears' of the anatomical pathologist.

Within a teleological ethics framework founded on virtues, the role-specific-responsibility of the anatomical pathologist is primarily and directly with the treating clinician and indirectly with the patient.

The development and exercise of the set of professional virtues identified in this thesis, helps anatomical pathology practitioners to become good collaborators in the anatomical pathologist-clinician relationships which serves the immediate ends of the practice adequately. These practice characteristic virtues together with the virtues that capture the essence and aims of all branches of healthcare practice, such as compassion, justice, benevolence, effacement of self-interest, etc., will ensure ethical practice in modern anatomical pathology.

Effective collaboration presupposes the possession of the virtues of *authenticity, love of learning, open-mindedness, curiosity, persistence,* and *intellectual courage*. These virtues help anatomical pathologists to be internally motivated to act in a manner aimed at the establishment of a meticulous diagnosis that is communicated in such a way as to best enable and aid the

treating clinician in the further management of the individual patient which will benefit the patient while distributing knowledge of the disease process for the improvement of healthcare provision. To be a good anatomical pathologist then, entails not merely having the technical knowledge, skills, and expertise, but also developing a set of virtues which allow for an effective relationship- of *collaboration*- with the clinician. By means of effective collaboration, the anatomical pathologist can realise the ends and goods of anatomical pathology in particular, and the general *telos* of the wellbeing of the patient which it shares with other healthcare practices.

I discussed the practical implication resulting from this thesis which relates to the recommendation for moral education for specialist training in anatomical pathology practice with the view of shaping the early professional identity of the anatomical pathology registrars and encouraging the development of the various virtues which enables anatomical pathologists to become effective collaborators.

Lastly, I also aimed to show that the proposed virtue ethics framework developed in this thesis is cogent, nuanced, and useful in application to resolving ethical issues that arise in the context of modern anatomical pathology practice.

CHAPTER 8: CONCLUDING REMARKS

Motivated by the neglect of virtue concepts and the shortcomings associated with the principle-based approach in current ethics discourse in modern anatomical pathology practice, the central aim in this thesis was to develop a nuanced and practicable virtue ethics framework that redirects the focus of ethical decision making on the human facets and particular role-contexts of the practice. This virtue ethics framework is aimed to serve as a guide to ethical decision-making in the context of modern anatomical pathology practice, promote excellence in the achievement of the internal goods and immediate ends specific to the practice which in turn, furthers its *telos*, the well-being of the patient. Lastly, this framework is intended to serve as the initial basis for the development of virtuous anatomical pathologists, through virtue-based moral education and continued professional education.

Given that the virtue ethics framework is specifically intended for the practice of modern anatomical pathology, and in order for the framework to be relevant to the characteristic features of the practice, it was important to first and foremost establish the conceptual foundation for understanding the nuances involved in the pathological diagnostic process. To this end, in chapter two, titled 'anatomical pathology as a human task and the need for ethics' I explored the origins and modern developments in the practice as a way of understanding the unique position of the practice in the chain of healthcare provision. I also described the various laboratory and human tasks required in the build-up to the final pathological diagnosis and the unusual relationships that characterise the practice.

Shedding light on the various nuances and complexities in the practice of anatomical pathology was an important outset which prepared the ground for understanding 'why the principle-based approach is insufficient' which is the heading of chapter three. In this chapter, I began with an account of the principle-based approach advanced by Beauchamp and Childress which is still the most influential and widely employed approach in ethical discourse in most, if not all, healthcare disciplines. Indeed, I showed how the principle-based approach that the authors advance purports to provide a practical and accessible moral guide to solving ethical dilemmas in the context of healthcare provision. I detailed how the four principles of autonomy, beneficence, non-maleficence, and justice constitute the set of essential obligations that healthcare practitioners should consider each time they are faced with an ethical dilemma. Nevertheless, I showed that despite its prevalence, the principle-based approach, on its own, is insufficient to serve as a complete moral guide to professional practice in healthcare provision

in general, and more specifically, in solving ethical dilemmas encountered in anatomical pathology practice. I established that the application of the four principles on its own in the context of modern anatomical pathology practice are not particularly helpful as it leaves several issues unexplored which are important in professional practice. Firstly, there is a gap in the identification of the role-specific responsibilities and goals distinctive of the practice of anatomical pathology which creates potential for conflict between the ethical responsibilities of the anatomical pathologist and those of the treating clinician respectively, towards their patients. Secondly, in the absence of an exploration of role-specific responsibilities and goals of the practice, the principles, on their own, are not particularly useful in resolving conflicts encountered beyond the clinical encounter, such as disagreement between the various healthcare practitioners in the chain of healthcare provision.

I did however acknowledge that the principles serve as valuable starting points that alert anatomical pathologists towards the technical and ethical norms of the practice. In respect to the ethical norms, the principles highlight, for instance that anatomical pathologists have a responsibility to benefit their patients by ensuring a timely and accurate diagnosis. Nonetheless, acting in a way that is right and that furthers the goals that anatomical pathology aims to achieve in the chain of healthcare provision, also requires wisdom and experience to deal with difficult ethical dilemmas. Furthermore, anatomical pathologists need to develop and exercise a set of professional virtues that allows them to negotiate disagreements in the anatomical pathologist-clinician relationship, thereby ensuring that the goals of anatomical pathology are achieved.

I concluded that, the principles are insufficient, on their own, in providing complete moral guidance in anatomical pathology practice and would benefit from supplementation with a set of professional virtues and the identification of specific ends of different subfields of healthcare practice, which in turn allows for the identification of role-specific responsibilities of the various healthcare practitioners.

My next task in chapter four was to evaluate whether a virtue-based approach is suitable in bridging the gaps identified in the application of the principle-based approach in the context of modern anatomical pathology practice. In this chapter, titled ‘a virtue-based approach’, I began with an overview of the origins of virtue ethics and the various ways in which the theory has been shaped over the years by various authors. I then explored Aristotelian notions of virtue which provided an initial understanding of a teleological approach and its application in the context of healthcare provision as an end-directed activity. I noted that the main criticism

levelled against Aristotelian virtue ethics is the mistaken idea that it fails to provide action guidance. However, by engaging with the work of modern virtue ethicists such as Hursthouse and Annas, I understood that virtue in fact makes strong demands for right responses or right action, through virtue rules which are particularly helpful in providing guidance in the context of healthcare. It is within these contexts, that the cultivation and exercise of certain virtues is valuable by assisting individuals in achieving excellence and fulfilment. I concluded that virtue ethics provides clear instructions for action with the added advantage that emotions, motivations, relationships and character form part and parcel of the action-guiding process. I established that, the most notable features of virtue ethics, in the context of the framework that I aim to develop in this thesis is that, apart from assisting anatomical pathologist in making right or virtuous decisions, it also guides the practitioners towards the development of a virtuous character, through role-modelling and the continued exercise and improvement of character traits that serve the ends of the practice adequately.

Having identified a theoretical virtue perspective that is useful, I proceeded with chapter five, titled 'towards a virtue ethics framework for modern anatomical pathology practice'. In this chapter, I began with an exploration of existing virtue accounts as a way of providing the initial perspective indicating how the noteworthy elements of the proposed virtue ethics framework are structured. To this end, I showed the noteworthy elements associated with Pellegrino's schema which seeks to provide a morality of medicine inherent from the clinical interaction with the patient. Several noteworthy aspects were incorporated in the elements of my proposed virtue ethics framework which can be summarised as follows. Healthcare practice deals with vulnerable individuals, the protection of whom is guaranteed by means of virtuous character of the healthcare practitioner who pledges to act for the benefit of the patient which is the end of clinical healthcare provision. While specific healthcare disciplines outside the clinical encounter with the patient tend to different immediate ends, the shared *telos* of all healthcare disciplines is the good of the patient. Nonetheless, it is essential to determine the more immediate ends of each of the disciplines outside of the clinical encounter in order to establish a hierarchy of the ethical duties specific to each discipline. Once the immediate ends of the practices outside those of the clinical encounter are used to achieve the ends of clinical medicine, those practices are considered to contribute towards the *telos* of healthcare practice.

I then moved on in the latter part of chapter five to identify the noteworthy aspects of Stempsey's characterisation of the virtuous pathologist and critique some of the features in the approach that he advances. My critique of his approach was related to the absence of

characterisation of the immediate ends of the practice of pathology which leads to a potential for conflict between the ethical duties of the pathologist and the treating clinician respectively, similarly to that encountered in the application of the principle-based approach. A further critique is related to the confusion between conceptual matters and empirical matters in the identification of the virtues needed for the attainment of the end of the practice (Spielthenner, 2017). In the last part of chapter five, I presented some initial perspectives in respect to the incorporation of some of the noteworthy elements in the proposed virtue ethics framework. These noteworthy elements can be summarised as follows. Anatomical pathology is a practice in the McIntyrean sense, characterised by unique relationships and role-specific duties and immediate ends particular to the activities internal to the practice and with a *telos*. The internal goods which are inherent to the practice of anatomical pathology are designated as *collaboration in the anatomical pathologist-clinician-patient relationship* and *excellence in diagnostic skills*. I also showed how the proposed virtue ethics framework accommodates the principles of biomedical ethics in the MacIntyrean conception of a practice guided by a set of specified ethical rules and norms, in this type of indirect form of patient care.

Chapter six was dedicated to presenting the empirical findings of the study. To this end, I presented the analyses of the views, opinions, and experiences of those in the practice as a way of informing the normative component. The views were related to the role of anatomical pathologists within the healthcare team and the goals of the practice, the immediate ends served by modern anatomical pathology and the professional virtues that are characteristic to the practice. I then presented a few interesting themes that emerged from the empirical component. The first is in respect to the goals of the practice of modern anatomical pathology which are viewed by those in the practice as serving through the pathological diagnostic report (which constitutes the diagnosis) in guiding the treating clinician in the further management of the patient. Participants in this study revealed that there are various elements which compose the pathological diagnosis; these are represented by a *confirmatory element*, a *predictive element*, and a *monitoring element*. Furthermore, the participants ascribed a further *preventative element* to the pathological diagnosis in the form of early detection of disease (particularly malignant disease) through screening programmes and a research element to the practice for the distribution of knowledge. These findings are significant in informing the immediate ends of the practice of anatomical pathology within the virtue ethics framework proposed in this thesis.

I further showed how the analysis of the findings in this study reveals that those in the practice of anatomical pathology view their role in the healthcare team as essential and fundamentally

rooted in the diagnosis of the disease. By means of this diagnosis, they support and guide the treating clinician in the further management of the patient. This finding is valuable in informing the unique role-specific responsibilities of anatomical pathologists in the framework proposed in this thesis. Regarding the identification of professional virtues, a noteworthy finding arising from the empirical data of this study, which does not feature in Stempsey's list of virtues of a good pathologist, is the broad virtue category of *wisdom and knowledge*. From this broad category, the character traits of *love of learning*, *open-mindedness* and *curiosity* were identified by the participants in this study as being important for a good anatomical pathologist to develop and exercise. From the broad category of the virtue of courage, the participants in this study considered that the character trait of *authenticity* is indispensable for the anatomical pathologist, followed by the character trait of *persistence*. Lastly, the participants considered that *teamwork* was another significant character trait that anatomical pathologists should possess. This is a meaningful outcome which illustrates that the professional virtues in the practice of anatomical pathology which are most significant in achieving the immediate ends of the practice are indeed different than those in clinical disciplines in which there is a direct contact with the patient.

My objective in chapter seven was the construction of the empirically informed virtue ethics framework and the resultant practical implications thereof. I began with the interpretation of the empirical findings related to the goals that anatomical pathology aims to achieve in order to inform the immediate ends of the practice. I argued that identifying the immediate ends of the practice represents a key element for the kind of ethical framework that I propose in this thesis which is teleological in that it links the virtues of the practice of anatomical pathology to the current and immediate ends of the practice. In the proposed virtue ethics framework modern anatomical pathology is an end-directed practice with internal goods specific to the practice, role-specific responsibilities, well-defined immediate ends, and a clearly established *telos*. Anatomical pathologists are the practitioners whose role-specific-responsibilities in the practice are directly with the treating clinician and indirectly with the patient. The internal goods specific to the practice are represented by the *collaboration in the anatomical pathologist-clinician-patient relationship* and *excellence in diagnostic skills*. The immediate ends of the practice of modern anatomical pathology are designated as:

- **Guiding the treating clinician (by means of the pathological diagnosis) in the selection of beneficial treatment for patients and monitoring treatment outcomes.**

- **Distributing knowledge of the disease process (by means of research) for the improvement of healthcare provision to communities.**

Collaboration within the anatomical pathologist-clinician relationship and generally with colleagues, presupposes the possession of the intellectual virtues of *love of learning, open-mindedness, curiosity,* and *intellectual courage,* as well as the moral virtues of *authenticity* and *persistence*. To this end, an evaluation of the various virtues identified by the participants in this study, find expression in a teleological virtue framework and provides justification for the identification of the set of virtues which are needed in order for anatomical pathologists to be good collaborators. This in turn helps them to achieve the internal goods of the practice, serve the immediate ends of the practice well, thereby advancing the *telos* of the practice. These virtues assist anatomical pathologists in responding virtuously which makes them good within the specific role. Being virtuous in that role constitutes being internally motivated to act in ways aimed at the establishment of a meticulous diagnosis that is communicated in such a way as to best enable and aid the treating clinician in the further management of the individual patient, which will benefit the patient while distributing knowledge of the disease process for the improvement of healthcare provision.

On the approach presented in this framework, anatomical pathology is viewed as a human endeavour and is afforded a more human dimension. Professional practice is understood and evaluated as a human task comprising various cognitive and collaborative activities which focus both on technical excellence, as well as on personal excellence through the development of character excellence. In this way, anatomical pathology practice is viewed in terms of specific roles within the healthcare team with well-defined immediate ends that serve to further its *telos*.

In sum, within the proposed framework, effective collaboration with the treating clinician and other colleagues is central to the identity and success of modern anatomical pathology practice. To be a good anatomical pathologist, requires excellence in diagnostic skills coupled with the development and exercise of a set of professional virtues which allow for an effective relationship- of *collaboration*- with the clinician and other colleagues. These virtues are open-mindedness, curiosity, love of learning, intellectual courage, authenticity, and persistence. Through the development and exercise of these virtues, anatomical pathologists become good *collaborators,* that guide the treating clinician in the selection of beneficial treatment and distribute knowledge of the disease process thereby benefiting the patient. The development

and exercise of these practice-specific professional virtues in conjunction with the well-established professional virtues required for all branches of healthcare such as compassion, justice, self-effacement, and so on, will ensure ethical practice in modern anatomical pathology.

In the latter part of chapter seven, I aimed to show that the proposed virtue ethics framework developed in this thesis is cogent, nuanced, and useful in application to resolving ethical issues that arise in the context of modern anatomical pathology practice. I achieved this by assessing the ethical issues characteristic to the practice and those identified in the empirical component in light of the framework developed in this thesis.

Finally, my expectation is that the virtue ethics framework proposed in this thesis may reinvigorate modern anatomical pathology as a human practice involving not merely cognitive excellence in diagnosis but also excellence in character and an identity within the healthcare team, in the chain of healthcare provision.

REFERENCE LIST:

Alavi, N., Khan, S.H., Saadia, A. and Naeem, T. (2020). Challenges in preanalytical phase of laboratory medicine: rate of blood sample nonconformity in a tertiary care hospital. *Electronic Journal of the International Federation of Clinical Chemistry and Laboratory Medicine*, 31(1): 21–27.

Annas, J. (2015). Applying Virtues to Ethics (Society of Applied Philosophy Annual Lecture 2014). *J. Appl. Philos,* 32(1):1-14.

Anscombe, G.E.M. (1958). Modern moral philosophy. *Philosophy*, 33(124): 1–19.

Apostolou, P. and Fostira, F. (2013). Hereditary breast cancer: the era of new susceptibility genes. *BioMed Research International*, 2013: 1-11.

Aristotle (1998) *Politics*. Translated by C.D.C Reeve. Indianapolis: Hackett Publishing Company.

Aristotle., Thomson, J.A.K. and Tredennick, H. (1976). *The ethics of Aristotle: The Nicomachean ethics*. Harmondsworth: Penguin.

Baron, D.N. (1993). Ethical issues and clinical pathology. *Journal of Clinical Pathology*, 46(5): 385–387.

Basta, Y.L., Baur, O.L., Van Dieren, S., Klinkenbijl, J.H.G., Fockens, P. and Tytgat, K.M.A.J. (2016). Is there a benefit of multidisciplinary cancer team meetings for patients with gastrointestinal malignancies? *Annals of Surgical Oncology*, 23(8): 2430–2437.

Beastall, G.H. (2013). Adding value to laboratory medicine: a professional responsibility. *Clinical Chemistry and Laboratory Medicine*, 51(1): 221–227.

Beauchamp, T. (2019) 'The principle of beneficence in applied ethics', in Zalta, E.N. (ed.) *The Stanford Encyclopedia of Philosophy*. Available online at: https://plato.stanford.edu/archives/spr2019/entries/principle-beneficence

Beauchamp, T.L. and Childress, J.F. (1979) *Principles of Biomedical Ethics*. New York: Oxford University Press.

Beauchamp, T.L. and Childress, J.F. (2013) *Principles of Biomedical Ethics* (7th ed.). New York: Oxford University Press.

Ben-Moshe, N. (2019). The internal morality of medicine: a constructivist approach. *Synthese*, 196(11): 4449–4467.

Blanchard, A. (2016). Mapping ethical and social aspects of cancer biomarkers. *New Biotechnology*, 33(6): 763–772.

Breathnach, C.S. (2002). Rudolf Virchow (1821-1902) and die cellularpathologie (1858). *Journal of the Irish Colleges of Physicians and Surgeons*, 31(1): 43–46.

Brennan, J. (2007). *The best moral theory ever: the merits and methodology of moral theorizing.* (Doctoral dissertation). The University of Arizona. Available online at: http://hdl.handle.net/10150/195168

Brody, H. and Miller, F.G. (1998). The internal morality of medicine: explication and application to managed care. *The Journal of Medicine and Philosophy*, 23(4): 384–410.

Campbell, A.V. (2003). The virtues (and vices) of the four principles. *Journal of Medical Ethics*, 29(5): 292–296.

Casadevall, A. and Fang, F. (2014). Diseased science. *Microbe Magazine*, 9(10): 390–392.

Clouser, K.D. and Gert, B. (1990). A critique of principlism. *Journal of Medicine and Philosophy*, 15(2): 219–236.

Cocks, M. (2016). Ethical considerations in pathology. *American Medical Association Journal of Ethics*, 18(8): 761–763.

Comte-Sponville, A. (2001) *A small treatise on the great virtues.* Translated by C. Temerson. New York: Metropolitan Books.

Cox, D. (2006). Agent-based theories of right action. *Ethical Theory and Moral Practice*, 9(5): 1-25.

Crisp, R. and Slote, M. (1997) *Virtue ethics*. Oxford: Oxford University Press.

Crotty, M. (1998) *The foundations of social research: meaning and perspective in the research process*. Thousand Oaks, California: Sage Publications.

D'Alessio, A., Proietti, G. and Scicchitano, B.M. (2019). Pathological and molecular features of glioblastoma and its peritumoral tissue, *Cancers*, 11(4): 1-19.

Doukas, D.J. (2003). Where is the virtue of professionalism? *Cambridge Quarterly of Healthcare Ethics*, 12: 147-154.

Encyclopedia Britannica. (2021). Encyclopaedia Britannica. Available online at: https://www.britannica.com

Foot, P. (1978) *Virtues and vices and other essays in moral philosophy*. Oxford: Oxford University Press.

Frankena, W.K. (1973) *Ethics*. London: Prentice-Hall.

Fuller, L.L. (1969) *The Morality of Law*. Boston: Yale University Press.

Garcia, J.L.A. (2017). The physician-to-patient relationship in virtues-based ethical analysis. *Life & Learning XXIII*, 225: 241.

Garcia, J.L.A. (2020). Virtues and principles in biomedical ethics. *Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine*, 45(4–5): 471–503.

Gardiner, P. (2003). A virtue ethics approach to moral dilemmas in medicine. *Journal of Medical Ethics:* 29(5): 297–302.

Gillon, R. (2015). Defending the four principles approach as a good basis for good medical practice and therefore for good medical ethics. *Journal of Medical Ethics*, 41(1): 111–116.

Glaser, B.G. and Strauss, A.L. (1967) *The discovery of grounded theory; strategies for qualitative research*. New Brunswick: Aldine de Gruyter.

Gómez-Lobo, A. and Keown, J. (2015) *Bioethics and the human goods: an introduction to natural law bioethics*. Georgetown: Georgetown University Press.

Grayston, C. (2005) 'Leukoplakia'. Available online at MedicineNet: https://www.medicinenet.com/leukoplakia/article.htm

Gu, J. and Taylor, C.R. (2014). Practicing pathology in the era of big data and personalized medicine. *Applied Immunohistochemistry & Molecular Morphology*, 22(1): 1–9.

Guinebert, S. (2020). How do moral theories stand to each other? *Zeitschrift für Ethik und Moralphilosophie*, 3(2): 279–299.

Hajdu, S.I. (2011). Microscopic contributions of pioneer pathologists. *Annals of Clinical & Laboratory Science*, 41(2): 201–206.

Hennink, M.M., Hutter, I. and Bailey, A. (2011) *Qualitative research methods*. California: Sage.

Horn, L. (2010). *Virtue ethics in the development of a framework for public health policy making.* (Doctoral dissertation). Stellenbosch University. Available online at: https://scholar.sun.ac.za/handle/10019.1/5418

Hughes, G.J. (2001) *Aristotle on ethics*. London: Routledge.

Hursthouse, R. (1999) *On virtue ethics*. Oxford: Oxford University Press.

Hursthouse, R. (2001) *On virtue ethics*. Oxford: Oxford University Press.

Hursthouse, R. and Pettigrove, G. (2018). 'Virtue ethics' in E.N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy* (pp.1-20). Stanford: Stanford University.

Kass, L. (1985) *Toward a more natural science: biology and human affairs*. New York: The Free Press.

Kenny, N. (2006). Medicine's malaise: the Pellegrino prescription. *The American Journal of Bioethics*, 6(2): 78–80.

King, L.S. (1967). How does a pathologist make a diagnosis? *Archives of Pathology*, 84(4): 331–333.

Korstjens, I. and Moser, A. (2018). Series: practical guidance to qualitative research. Part 4: trustworthiness and publishing. *European Journal of General Practice*, 24(1): 120–124.

Kotsonis, A. (2021). Epistemic collaborativeness as an intellectual virtue. *Erkenntnis* [Preprint].

Kotzee, B., Ignatowicz, A. and Thomas, H. (2017). Virtue in medical practice: an exploratory study. *HEC forum: an Interdisciplinary Journal on Hospitals' Ethical and Legal Issues*, 29(1): 1–19.

Ladd, J. (1983) *The internal morality of medicine: an essential dimension of the patient-physician relationship*, Dordrecht: D. Reidel.

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic Inquiry*. California: Sage.

Louden, R.B. (1984). On some vices of virtue ethics. *American Philosophical Quarterly*, 21(3): 227–236.

MacIntyre, A.C. (2016) *Ethics in the conflicts of modernity: an essay on desire, practical reasoning, and narrative*. Cambridge: Cambridge University Press.

MacIntyre, A.C. (1984) *After virtue: a study in moral theory* (2nd ed.). Notre Dame: University of Notre Dame Press.

Mayeux, R. (2004). Biomarkers: potential uses and limitations. *Neurotherapeutics*, 1(2): 182–188.

Meara, N.M., Schmidt, L.D. and Day, J.D. (1996). Principles and virtues: A foundation for ethical decisions, policies, and character. *The Counseling Psychologist*, 24(1): 4–77.

Mirtavoos-Mahyari, H., Khosravi, A. and Esfahani-Monfared, Z. (2014). Human Epidermal Growth Factor Receptor 2 and Estrogen Receptor Status in respect to tumor characteristics in non-metastatic breast cancer. *Tanaffos*, 13(1): 26.

Moser, A. and Korstjens, I. (2018). Series: practical guidance to qualitative research. Part 3: sampling, data collection and analysis. *European Journal of General Practice*, 24(1): 9–18.

Mueller, W.H. (1991). 'Biological markers in epidemiology' in B. S. Hulka, T. C. Wilcosky, and J. D. Griffith (eds). *American Journal of Human Biology* (pp. 218–219). New York: Oxford University Press.

Nakhleh, R.E., Gephardt, G. and Zarbo, R.J. (1999). Necessity of clinical information in surgical pathology. *Archives of Pathology & Laboratory Medicine*, 123(7): 615–619.

Niemiec, R.M. (2013). 'VIA character strengths: research and practice (the first 10 years)' in H.H. Koop and A.D. Fave (eds) *Well-being and cultures: Perspectives from positive psychology* (pp. 11-29*)*. New York: Springer.

Nussbaum, M.C. (1999). Virtue ethics: a misleading category? *The Journal of Ethics*, 3(3): 163–201.

Oakley, J. and Cocking, D. (2001) *Virtue ethics and professional roles*. Cambridge: Cambridge University Press.

Olivieri, H.M. (2018). *Recta Ratio Agibilium* in a medical context: the role of virtue in the physician-patient relationship. *Philosophy, Ethics, and Humanities in Medicine:* 13(1): 2-5.

Orlandi, A. (2016). The molecular pathology between prevention and care: the new renaissance of anatomic pathology. *Biomedicine and Prevention* [Preprint].

Ortmann, L.W., Barret, DH., Saenz, C., Bernheim, RG., Dawson, A., Valentine, JA. and Reis, A. (2016). 'Public Health Ethics: Global Cases, Practice, and Context' in H. Barrett, *et al*. (eds) *Public Health Ethics: Cases Spanning the Globe* (pp.3–35). Cham: Springer.

Parslow, T.G., Adsay, NVA., Krasinskas, AM. and Roback, JD. (2017). Impacts of new concepts and technologies on the practice of diagnostic pathology: an Emory University perspective. *Archives of Pathology & Laboratory Medicine*, 141(3): 325–328.

Pellegrino, E. D. (1995). Toward a virtue-based normative ethics for the health professions. *Kennedy Institute of Ethics Journal*, 5(3): 253–277.

Pellegrino, E.D. (1998). What the philosophy of medicine is. *Theoretical Medicine*, 19(4): 315–336.

Pellegrino, E.D. (2001). The internal morality of clinical medicine: a paradigm for the ethics of the helping and healing professions. *The Journal of Medicine and Philosophy*, 26(6): 559–579.

Pellegrino, E.D. (2002). Professionalism, profession and the virtues of the good physician. *Mount Sinai Journal of Medicine,* 69(6): 378–384.

Pellegrino, E.D. (2005). 'The "telos" of medicine and the good of the patient' in C. Viafora (eds) *Clinical Bioethics: A Search for the Foundations* (pp. 21–32). Dordrecht: Springer.

Pellegrino, E.D. (2008) *The philosophy of medicine reborn: a Pellegrino reader*. Notre Dame: University of Notre Dame Press.

Pena, G.P. and Andrade-Filho, J.deS. (2009). How does a pathologist make a diagnosis? *Archives of Pathology & Laboratory Medicine,* 133(1): 124–132.

Peterson, C. and Seligman, M.E.P. (2004) *Character strengths and virtues: a handbook and classification*. New York: American Psychological Association.

Pettigrove, G. (2018). 'Alternatives to Neo-Aristotelian virtue ethics' in N.E. Snow (eds) *The Oxford Handbook of Virtue* (pp. 359-376). New York: Oxford University Press.

Putman, D. (1997). Psychological courage. *Philosophy, Psychiatry, and Psychology*, 4(1): 1–11.

Rachels, J. (1999) *The elements of moral philosophy*. New York: McGraw-Hill College.

Rathnayaka, R., Beneragama, D. and Hewavisenthi, J. (2016). Are we addressing ethical issues in histopathology adequately? *Journal of Diagnostic Pathology*, 10 (2): 1-4).

Rawls, J. (2005) *A theory of justice*. Cambridge: Harvard University Press.

Rhodes, R. (2019). Why not common morality? *Journal of Medical Ethics*, 45(12): 770–777.

Rodogno, R. (2015). 'Prudential value or well-being' in D. Sander and T. Brosch (eds) *Oxford Handbook of value: The Affective Sciences of values and Valuation*. Oxford: Oxford University Press.

Rosai, J. (2011) *Rosai and Ackerman's surgical pathology E-Book*. Lisse: Elsevier Health Sciences. Retrieved from: https://books.google.co.za/books/about/Rosai_and_Ackerman_s_Surgical_Pathology.html

Ross, W.D. (1973) *The Right and the Good.* London: Clarendon Press.

Salloch, S., Vollmann, J. and Schildmann, J. (2014). Ethics by opinion poll? The functions of attitudes research for normative deliberations in medical ethics. *Journal of Medical Ethics*, 40(9): 597–602.

Schneewind, J.B. (1991). MacIntyre and the indispensability of tradition. *Philosophy and Phenomenological Research*, 51(1): 165–168.

Serafimov, A. (2011, October). *Ethical problems in pathology practice*. Paper presented at the 1st Macedonian Congress of Pathology, At Ohrid. Book of Abstracts: 12-16.

Shea, M. (2020). Principlism's balancing act: why the principles of biomedical ethics need a theory of the good. *The Journal of Medicine and Philosophy*, 45(4–5): 441–470.

Slote, M. (2001) *Morals from motives*. New York: Oxford University Press.

Spielthenner, G. (2017). Virtue-based approaches to professional ethics: a plea for more rigorous use of empirical science. *ethic@ - An International Journal for Moral Philosophy*, 16(1): 15–34.

Stempsey, W.E. (1989). The virtuous pathologist. An ethical basis for laboratory medicine. *American Journal of Clinical Pathology*, 91(6): 730–738.

Swanton, C. (2001). A virtue ethical account of right action. *Ethics*, 112(1): 32–52.

Swick, H.M. (2000). Toward a normative definition of medical professionalism. *Academic Medicine*, 75(6): 612–616.

Symons, X. (2019). Pellegrino, MacIntyre, and the internal morality of clinical medicine. *Theoretical Medicine and Bioethics*, 40(3): 243–251.

Taylor, H.A., Hull, S. and Kass, N. (2010). Qualitative methods. *Methods in medical ethics:* 193–214.

Troxel, D.B. and Sabella, J.D. (1994). Problem areas in pathology practice. Uncovered by a review of malpractice claims. *The American Journal of Surgical Pathology*, 18(8): 821–831.

Underwood, J.C.E. (1987). 'Diagnostic histopathology' in Underwood, J.C.E. (eds) *Introduction to Biopsy Interpretation and Surgical Pathology* (pp. 1-16). London: Springer.

Van den Tweel, J.G. and Taylor, C.R. (2010). A brief history of pathology. *Virchows Archiv, European Journal of Pathology*, 457(1): 3–10.

Van Niekerk, A. and Nortjé, N. (2013). Phronesis and an ethics of responsibility. *South African Journal of Bioethics and Law*, 6(1): 28–31.

Van Zyl, L. (2011). Rightness and goodness in agent-based virtue ethics. *Journal of Philosophical Research,* 36: 103–114.

Veatch, R.M. (2001). The impossibility of a morality internal to medicine. *The Journal of Medicine and Philosophy,* 26(6): 621–642.

Waltho, S. (2010). *Genealogical critique of Beauchamp and Childress' four principles approach to medical ethics.* (Doctoral dissertation). Cardiff University. Available online at: https://orca.cardiff.ac.uk/54192/1/U564710.pdf

Wijeratne, N. and Benatar, S.R. (2010). Ethical issues in laboratory medicine. *Journal of Clinical Pathology*, 63(2): 97–98.

Zagzebski, L.T (2010). Exemplarist virtue theory. *Metaphilosophy*, 41(1/2): 41–57.

Zagzebski, L.T. (1996) 'A theory of virtue and vice' in *Virtues of the Mind: An Inquiry into the Nature of Virtue and the Ethical Foundations of Knowledge* (pp. 77–258). Cambridge: Cambridge University Press.

APPENDICES

Ethics clearance- Appendix 1

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Miniggio

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H17/10/09**
PROJECT TITLE	A virtue ethics framework for modern anatomical pathology
INVESTIGATOR(S)	Dr H Miniggio
SCHOOL/DEPARTMENT	Health Sciences/
DATE CONSIDERED	20 October 2017
DECISION OF THE COMMITTEE	Approved Two year extension only
EXPIRY DATE	30 November 2022

DATE 01 December 2017 **CHAIRPERSON** J. Knight
(Professor J Knight)

cc: Supervisor : Dr C Wareham

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

Signature Date 25 / 11 / 2020

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

Participant information sheet- Appendix 2



Good day

My name is Hilde Doris Miniggio, and I am PhD student in Bioethics and Health Law, Steve Biko Centre for Bioethics at Wits University in Johannesburg. As part of my studies, I have to undertake a research project. The title of my research project is *A virtue ethics framework for modern Anatomical Pathology*. The aim of this research project is to develop a virtue based ethical approach to solve ethical issues distinct to modern Anatomical Pathology practice.

As part of this project, I would like to invite you to take part in an interview. This activity will involve answering questions regarding the characteristic traits which are important in the practice of Anatomical Pathology, the role that the Anatomical Pathologist plays within the healthcare team, the goal of the practice of Anatomical Pathology and the moral and ethical issues which may have resulted from the introduction of new molecular and genetic techniques, including biomarkers to the routine practice of Anatomical Pathology. The interview will take approximately 60 minutes. With your permission, I would also like to record the interview using a digital device.

You will not receive any direct benefits from participating in this study, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to**.** The interview will be completely confidential and anonymous as I will not be asking for your name or any identifying information, and the information you give to me will be held securely and not disclosed to anyone else. In the event of data sharing with other researchers for academic purposes written permission will be sought from University Human Research Ethics Committee (non-medical). If you experience any distress or discomfort, we will stop the interview or resume another time.

If you have any questions afterwards about this research, feel free to contact me or my supervisor on the details listed below. This study will be written up as a research report which will be available online through the university library website. If you have any queries,

concerns or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (non-medical), telephone + 27(0)11 717 1408, email: hrec-medical.researchoffice@wits.ac.za/ Shaun.Schoeman@wits.ac.za.

Yours sincerely,

Researcher: Dr Hilde Doris Miniggio
email: Hilde.miniggio@gmail.com

Supervisor: Dr Christopher Wareham
email: christopher.wareham@wits.ac.za

Interview guide- Appendix 3

Introduction

My name is Hilde Miniggio, and I am conducting research through the University of Witwatersrand in fulfilment of the requirements for the Doctor of Philosophy degree in Bioethics and Health Law. The purpose of my research is to develop a virtue ethics framework for Modern Anatomical Pathology.

Please note that you are free to withdraw from this research at any time and confidentiality and anonymity will be ensured throughout the study as no names will be used during data collection, analysis, and dissemination of the results of this study.

Everything you tell me will only be used for this research project and will not be shared with anyone outside the research team. Also, your name will not be used to make sure that no one can identify you. You may decline to answer some questions in the interview, and should you wish to discontinue participation, you may do so freely at any time and without giving a reason.

Do you have any questions before we begin?

Background information:

No of interview:

Opening questions:

Can you tell me why you have chosen this particular medical speciality?

How many years have you been practicing in this medical specialty?

How has the practice of Anatomical Pathology changed over the years?

Key questions:

In your opinion and experience, what is the role of the anatomical pathologist within the healthcare team?

In your opinion and experience, how important is the relationship between the Anatomical Pathologist and the Clinician for the general good of the patient?

What are some of the challenges that you have encountered in the relationship with the clinician?

How can the pathologist/ clinician relationship be improved?

In your opinion and experience, what is the main goal/ aim of the practice of Anatomical Pathology?

From this list of 24-character traits can you please choose the five which you think best exemplify the good Anatomical Pathologist.

Could you describe any character traits that you would consider good for an Anatomical Pathologist to have that are not on the list?

Biomarkers:

What are some of the ethical issues or problems you have encountered in the use of biomarkers for diagnosing malignancies?

Closing questions:

How do you see the role of pathology in the future?

Thank you for your time.

Consent form to participate in the study- Appendix 4

CONSENT FORM

Title of project**: A virtue ethics framework for modern Anatomical Pathology**

Name of researcher: Hilde Doris Miniggio

I ……. agree to participate in this research project. The research has been explained to me and I understand what my participation will involve.

I agree that my participation will remain anonymous YES NO (please circle)

I agree that the researcher may use anonymous quotes in his research report YES NO

I agree that the interview may be audio recorded YES NO

I agree that the information I provide may be used anonymously by other researchers following this study YES NO

…… (signature)

…… (name of participant)

…… (date)