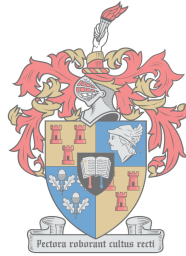


**Raising ethical issues in the dead:
An exploration of ethical challenges in Forensic Medicine**

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Thesis presented in partial fulfillment of the requirements for the Degree of Master of Philosophy in
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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

March 2018

Abstract

This dissertation explores ethical challenges in the forensic medicine field. Pivotal to forensic pathology are the deceased and the medico-legal investigation. The unique relationship between forensic doctor and deceased is distinctly different to the doctor-patient relationship of most other medical disciplines. This highlights the importance of focused ethical deliberation in this field, which is long overdue. I argue that the deceased is an entity with moral status worthy of moral deliberation. I demonstrate that five concepts, namely, human properties, relationship considerations, moral agency, symmetry, and cultural and religious considerations, contribute to the deceased's moral standing. The matter is not whether the deceased has moral status, but the scope of obligation to which such a moral status gives rise.

Two questions have guided this thesis: First, *do ethical issues exist in the field of forensic medicine in the South African context; and what are some of these issues?* Secondly, *if there are ethical issues, how can they best be identified and explored?*

South Africa's recent history demonstrates the existence of ethical issues in forensic medicine, historically. The first major ethical arena revolves around the conflict of interest conundrum, which is especially prevalent in forensic medicine. Current dual loyalty concerns involve the deceased and the intricately linked judicial system, under which the forensic doctor works. The second area of ethical concerns relates to retained post mortem interests of the deceased.

Prior to exploring these ethical issues, a framework had to be identified. No forensic medicine-specific framework was forthcoming in my literature search. In chapter four I argue that the principlism approach is a worthy framework to consider in addressing ethical issues in forensic medicine, in comparison with other prominent bioethics theories.

Subsequent chapters illustrate ethical issues in forensic medicine by using principlism. The principle of justice was subdivided to incorporate three important aspects of justice, namely legal justice, rights-based justice and distributive justice. Beneficence as a positive act of doing good was discussed and aligned to the different role players involved in the medico-legal investigation. Non-maleficence was then discussed as related to avoidance of harm. Lastly, the principle of autonomy was deliberated to be applicable to the deceased as certain ante mortem interests remained post mortem.

In summary, the two opening questions were answered in the dissertation. Ethical issues do exist in forensic medicine. Some of these issues were identified and subsequently explored in the thesis by means of principlism.

Raising ethical issues in the dead is not merely a clever play on words, but indeed a necessary ethical discussion. Since ethical deliberation in forensic medicine is a largely unexplored terrain, recommendations for practice and future exploration are made.

Opsomming

Hierdie verhandeling ondersoek die etiese uitdagings wat in forensiese medisyne voorkom. Forensiese patologie fokus op die oorledene en die medies-geregtelike ondersoek. Die unieke verhouding tussen die forensiese dokter en oorledene is by uitstek anders as die gewone dokter-pasiënt verhouding van ander mediese dissiplines. Vandaar die belang van gefokusde etiese beraadslaging in dié veld, wat al lank agterweë gebly het. Ek redeneer dat die oorledene 'n entiteit is wat morele status het en aanspraak kan maak tot morele oorweging. Ek demonstreer dat vyf konsepte bydra tot die oorledene se morele status, naamlik die menslike eienskappe, verhoudingsoorwegings, morele agentskap, simmetrie, en kulturele en geloofsoortuigings. Die saak gaan dus nie oor of die oorledene morele status het nie, maar die omvang van verpligtinge waartoe die status aanleiding gee.

Die tesis handel rondom twee vrae: Eerstens, *bestaan etiese kwessies in forensiese medisyne in Suid Afrika, en wat is van die kwessies?* Tweedens, *as daar etiese kwessies bestaan, hoe kan dit geïdentifiseer en ondersoek word?*

Onlangse Suid Afrikaanse geskiedenis demonstreer dat etiese kwessies bestaan in forensiese medisyne, histories. Die eerste hoof etiese terrein handel oor konflik van belange, wat veral algemeen is in forensies. Die kwessie van dubbele lojaliteite betrek die oorledene, wat intiem gekoppel is aan die geregtelike sisteem, waaronder die forensiese dokter werk. Die tweede area van etiese kwessies handel oor die behoue nadoodse belange van die oorledene.

Voor die bespreking van etiese kwessies, moet 'n raamwerk geïdentifiseer word. 'n Literatuursoektog het nie 'n forensies-spesifieke raamwerk opgelewer nie. In die vierde hoofstuk redeneer ek dat die vier beginsel benadering 'n waardige raamwerk is om etiese kwessies in forensiese medisyne aan te spreek, in vergelyking met ander prominente bio-etiese teorieë.

Die daaropvolgende hoofstukke demonstreer etiese kwessies in forensiese medisyne na aanleiding van die vier beginsels benadering. Die beginsel van geregtigheid was onderverdeel om drie belangrike aspekte van geregtigheid uit te lig, naamlik wetlike geregtigheid, regte-gebaseerde geregtigheid en distributiewe geregtigheid. Goedwilligheid as 'n positiewe aksie om goed te doen, is bespreek en toegepas tot die verskillende rolspelers wat betrokke is in 'n medies-geregtelike ondersoek. Nie-kwaadwilligheid is toe bespreek ten opsigte van die vermyding van skade. Die beginsel van outonomie is laastens bespreek in toepassing tot die oorledene, ten opsigte van sekere voordoodse belange wat steeds nadoods belangrik is.

Opsommend: die oorspronklike twee vrae is beantwoord in die tesis. Daar bestaan beslis etiese kwessies in forensiese medisyne. Sommige van hierdie kwessies is geïdentifiseer en ondersoek in dié tesis aan die hand van die vier beginsel benadering.

Die opwekking van etiese kwessies in die oorledene is nie net 'n slim woordkeuse nie, maar 'n noodsaaklike besprekingspunt. Aangesien etiese beredenering in forensiese medisyne grootliks ongekende terrein is, word voorstelle vir praktyk en toekomstige verkenning uitgelig.

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Dedications

I would like to dedicate my work firstly to my God. May it bring a smile to Your face, Abba.

Secondly, I dedicate this work to my dad. Pappa, your own dedication to excellence, continued desire to grow your mind and make an impact in this world, has led me to this point. Each morning that I woke up too early to mention, I thought of you waking up in the early hours of the morning. I remember you typing away on you *Perkins* and that sound was a reassurance of your presence and dedication to what you believe in. Thank you for never tiring to hear about all my plans and ideas and encouraging me to fly higher than I ever would have dreamt myself. Your eyes light up when I talk passionately about my ideas. Dankie, pappa.

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Glossary

Advance Directives – Expression of person's preferences for end-of-life care.

AMA – American Medical Association

ANC – African National Congress

BBC – British Broadcasting Corporation

CCD – Centre for Communicable diseases

CDC – Centre for Disease Control

CJS – Criminal Justice System

CNN- Cable News Network

CSI – Crime scene investigation

CXR – Chest X-ray

DA – Democratic Alliance

DHA – Department of Home Affairs

DNA – Deoxyribonucleic acid

Dr – Doctor

ET – Endo-tracheal tube

FPO – Forensic Pathology Officer

FPS – Forensic Pathology Service

GMC – General Medical Council

HIV – Human Immunodeficiency Virus

HPCSA – Health Professional Council of South Africa

IAFS – International Association of Forensic Sciences

IPID – Independent Police Investigative Directorate

Living Will – written request about medical care approved of by person in case of terminal illness or condition that impairs decision making ability.

LCRC – Local Criminal Record Centre

Lodox – A highly sophisticated radiological equipment

MDR – Multi drug resistant

Mr - Mister

MRC – Medical Research Council

NAME – National Association of Medical Examiners

NCIS – Naval Criminal Investigative Service

NCOD – National Centre for Occupational Diseases

NFDD – National Forensic DNA Database

NHA - National Health Act 61 of 2003

NHREC - National Department of Health's Research Ethics Council

NPA – National Prosecuting Authority

PMSR – Post mortem Sperm Retrieval

REC – Research Ethics Committee

S.A. – South Africa

SAMDC – South African Medical and Dental Council

SAPS – South African Police Service

SOP – Standardised Operating Procedures

SUDI – Sudden, unexpected death in infant

SIDS – Sudden Infant Death Syndrome

SNV – Sin Nombre Virus (as a Hantavirus)

Stats SA – Statistics South Africa

SUDA – Sudden unexpected death in adult

PTB- Pulmonary Tuberculosis

TB - Tuberculosis

MDR TB – Multi-drug resistant Tuberculosis

UNESCO – United Nations Educational, Scientific and Cultural Organization

UNISA – University of South Africa

UDofHR - Universal Declaration of Human Rights

U.N. – United Nations

US – University of Stellenbosch

USA – United States of America

WHO – World Health Organization

WMA – World Medical Association

XDR – Extensively drug resistant

Chapter 1: Introduction

Do not go gentle into that good night

Dylan Thomas, 1914 - 1953

Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light.

Though wise men at their end know dark is right,
Because their words had forked no lightning they
Do not go gentle into that good night.

Good men, the last wave by, crying how bright
Their frail deeds might have danced in a green bay,
Rage, rage against the dying of the light.

Wild men who caught and sang the sun in flight,
And learn, too late, they grieved it on its way,
Do not go gentle into that good night.

Grave men, near death, who see with blinding sight
Blind eyes could blaze like meteors and be gay,
Rage, rage against the dying of the light.

And you, my father, there on the sad height,
Curse, bless, me now with your fierce tears, I pray.
Do not go gentle into that good night.
Rage, rage against the dying of the light.¹

¹ Dylan Thomas was a well-known Welsh poet and writer. His poems are popular and easy to find on the internet. This one I accessed via: <https://www.poets.org/poetsorg/poem/do-not-go-gentle-good-night>

1.1 Background

One denominator that crosses all boundaries of all species, including humans, is the denominator of death. Death is the equalizer. Everyone will die. In her introductory chapter of *Mourning rituals and Practices in Contemporary South African Townships: A Phenomenological Study*, T. H. S. Setsiba writes that “among all forms of experiences that occur in any given culture, society or community, death seems to be the one that transcends them all” (Setsiba, 2012, p.1-2). The only uncertainty of death is the timing thereof for most individuals. The phenomenon of death in humanity is a complex concept, in basic terms it means the cessation of ‘life’; i.e. ceasing to have a self-sustained heart beat and respiration on a physical level. I am not referring here to any vegetative states or ventilator assisted and brain-dead individuals. Tightly weaved into the concept of death is the complex understanding of the individual’s physical cessation to be and the perceptions and understanding of those surrounding the deceased. The complexity of understanding and interpreting death varies between individuals, families, communities, countries and cultures. The questions surrounding death have intrigued philosophers since the beginning of time and have inspired many writings as prominent as the works of Shakespeare and Dylan Thomas.

In certain scenarios death may be ‘expected’ and even ‘welcome’, such as the oncology patient with terminal end stage disease or the ninety-year-old who dies in their sleep. Unfortunately, not all death is awaited or expected. When death comes unexpectedly or unjustly it can be very distressing. Ironically, the first recorded death of humanity we find in literature was an unnatural death, when Cain killed Abel. This murder was recorded in the Hebrew narrative found in the Torah (specifically the Pentateuch) of the Jews and the Bible of the Christians (both Genesis 4), and correlates to the fifth chapter of the Quran of the Muslims written in Arabic (Qabil and Habil).

Forensic medicine, as a specialty branch of medicine, falls within this ‘unpleasant’ domain of death. Unexpected, unexplained and unfortunately unnatural in most of cases. These unnatural deaths can be attributed to many factors including nature, accidents and inter-personal violence. The impact of a tsunami, for example, has devastating consequences, including the deaths of hundreds of people, many unidentified. Accidents such as motor vehicle accidents are unfortunate and far too common in South Africa, and over 1700 deaths were recorded just over the festive season of December 2016 and January 2017, as reported by Minister of Transport Dipuo Peters (Ngcobo, 2017). Deaths attributed to inter-personal violence are especially traumatic, particularly if coupled with human rights abuses. Thousands of immigrants are fleeing warring countries every year, and this has led to the untimely demise of many. This has been especially true where the migration takes place with extreme environmental factors over inhospitable terrains and expansive bodies of water. Cable News Network (CNN) reported that over 3800 died while crossing the Mediterranean Sea to enter Europe while fleeing their home countries, such as Libya or Turkey (Smith-Spark, 2016). The ongoing Syrian war has also seen millions displaced within the country and fleeing as refugees, many dying in the process.

The history of humanity is full of examples of deaths on mass scale that were not only unnatural, but also unjust. The Tiananmen Square Massacre of 4 June 1989 is just such an example. To date, no concrete figures for the death toll are available, partly as the Chinese government at the time did not want to admit any blame as to these tragic deaths of students and civilians. Chai Ling was one of the most prominent student leaders of the movement that tragically ended in the horrific massacre. She documents her own life’s journey and weaves this into the historical facts surrounding that fateful Spring in China (Ling, 2011).

The greatest example of the “unjust” domain related to death and human rights abuses was probably highlighted by the Second World War and the atrocities to humans regarded as unequal to the superior Aryan race Hitler was striving for. Some of these atrocities included the death of millions of people, primarily Jews, and is commonly referred to as the Holocaust.

The turn of the millennium also saw the tragic deaths of almost 3000 people in the September 11th, 2001 terrorist attacks, which primarily affected New York City. Known as 9/11, these attacks shook the world.

Our own African continent also shouts out with reminders of the gross human rights abuses resulting in death, such as the Rwandan genocide of 1994. The majority of the Thutsi population was killed. Some of the devastation was vividly captured in the documentary style movie *Shooting Dogs*. The movie title referred to the (United Nations) U.N. troops, who were present to observe, but could not stop the genocide. This led to some U.N. officers shooting the dogs eating the corpses of the slain Thutsis.

Unfortunately, further south in the African continent, South Africa also had major injustices against certain racial groups, with deep unethical roots. In the apartheid system many human rights abuses, even deaths, were prevalent in the then prevailing justice system, with indorsed many unethical laws. The Steve Biko incident is a prime example of unethical “justice” and I will refer to it again in the chapters to follow, illustrating in more detail that laws do not automatically equate morality. I mention the Steve Biko case specifically because of the local relevance to forensic medicine.

Doctor (Dr) Xolela Mangcu wrote an excellent biography entitled: *Biko: the Biography* (2012). I do not seek to sensationalize this tragic event, but rather highlight the importance of having good governing ethical principles in place to prevent such atrocities from repeating themselves in South Africa. Biko was a black political activist who fought during the apartheid regime for the emancipation of black people. He was a registered law student with University of South Africa (UNISA), as well as a well-known Black Consciousness Movement leader. He was arrested on the 18th of August 1977 in Port Elizabeth, under the previous Terrorist Act. He was assaulted and tortured on the 6th of September 1977, while in police custody in Port Elizabeth. After sustaining significant injuries, he was still interrogated and chained to the metal prison door. Biko showed signs of a serious head injury, yet he only received medical attention one day later. Unfortunately, despite sustaining multiple injuries, including the serious head injury, the attending district surgeons did not refer Biko for the appropriate medical attention, as this would have risked the exposure of his torture to the public. The doctors neglected to refer him immediately to a nearby hospital, according to the police request, and referred him to Pretoria instead. Only on September the eleventh was the “*naked, manacled and unconscious*” (Mangcu, 2012, p.262) Biko transferred to Pretoria Central Prison hospital section. He did not receive appropriate medical care on arrival and died on the twelfth of September 1977: “*in the words of Sydney Kentridge, ‘a miserable and lonely death on a mat on a stone floor in a prison cell’*” (2012, p.262).

The (University of Cape Town) UCT Vice-Chancellor, Njabulo Ndebele, described this horrible event as: “*a continuum of indescribable insensitivity that begins as soon as Steve Biko and Peter Jones are arrested at a roadblock near Grahamstown on 18 August 1977. It starts with lowly police officers who make the arrest in the relative secrecy of a remote setting and ends with a remarkable public flourish, when a minister of government declares that Biko’s death leaves him cold.*” (Mangu, 2012, p.262).

According to the post mortem report the assault on Biko included force to his head that resulted in a massive brain hemorrhage, eventually leading to death. This incident illustrates the front-line seats that forensic physicians have in relation to human rights abuses and the importance of understanding the past mistakes, for future sensitivity towards ethical practices in this field of medicine.

If Biko had died now, in the democratic South Africa, he would still have undergone a full forensic autopsy, comparable to what he had at the time of his demise. His terminal cause of death would have been the same in these different time periods. The main difference today, I would hope, would be the recognition of inappropriate physical assault and torture that led to the terminal cause of death. This correlation was not stated in the initial autopsy report. It should have also highlighted the medical negligence of the physicians responsible for treating the prisoner in custody. Unfortunately, this was not the case in 1977. Only two years after the death of Biko (and long after the autopsy) was an investigation done by the then South African Medical and Dental Council disciplinary committee (SAMDC), and they found no *prima facie* case against the doctors. Another petition to the SAMDC to probe Steve Biko's death was rejected, as they felt no new evidence had come to light. After intense international pressure on South Africa to investigate the death, eight years after Mr Biko died the Pretoria Supreme Court ordered the SAMDC to investigate the death again. Justice Boshoff then determined that the doctors involved indeed did show *prima facie* evidence of improper and disgraceful professional conduct when treating Biko (Baxter, 1985, pp.145-148).

The death of Steve Biko clearly illustrates the tragic impact that unethical governing structures can have, specifically in dual loyalty situations. I will discuss dual loyalty in much more detail later in this chapter and other chapters to come. It is my opinion that without laws protecting the rights of all people, equally, it is easy to fall prey to governing structures. Critically analysing the underlying morality of the laws is important. Many of the apartheid laws of the time were not morally accepted by the entire nation and many laws then did not regard the rights of all people equally. Most of the current laws governing the democratic South Africa since 1994 are morally more widely-accepted, as the laws should conform to the ethos of the Constitution. I will give more details about laws and structures in chapter 5. However, not all current laws are regarded as ethical by all members of civil society. This is well illustrated by Moodley in her book; "*Medical Ethics, Law and Human Rights*", where the new Choice of Termination of Pregnancy Act of 1996 is used as an example of this (2011, p.11). I will also explore this relationship between law and ethics later in the thesis, as the field of forensic medicine is intricately linked to law.

Even with the current laws underscoring the equality of all South Africans, as outlined in the current South African Constitution, and presented in the Bill of Rights, immorality and social inequalities still prevail. Societal imbalances in the aftermath of post-apartheid scars are still prevalent and intimately linked to the high rate of poverty and unemployment, high inter-personal violence ratio, substance abuse, and corruption to mention but a few. These factors emphasise why all laws need to be scrutinised and why professional bodies, such as those governing the medical profession, need to ask pertinent questions about ethics. If we neglect to look deeper and probe into the morality of our professional spheres of influence, unethical practices will continue; perhaps not so evidently unjust and unethical as in the case of Steve Biko, but none the less there. The thesis will strive to illustrate some of the current ethical challenges encountered in the field of forensic medicine.

1.2 What is forensic medicine?

Forensic doctors in South Africa are primarily employed by the state sector. Some doctors working in the private sector, such as GP's in rural areas, may also do forensic work at times, if required. The Forensic Pathology Services (FPS), currently fall under the Department of Health, as well as working closely with the Department of Justice.

So, what is forensic medicine? According to the booklet on the National Code of Guidelines for Forensic Pathology Practice in South Africa, "*Forensic Pathology Service has as its primary objective the rendering of a medico-legal investigation of death service that serves the judicial process*" (2007, p.5, s16). It is also stated as "*to facilitate the administration of justice*" (2007, p.13, s55). In other words, the investigation is centred around the deceased and in assisting the court to determine if the death was natural or unnatural and if the court needs to prosecute any individual if criminal activity was involved.

The above-mentioned booklet also stipulates the following important objectives that help to better understand the functioning thereof, namely (2007, p.13, s56):

- *"To establish the primary medical cause of death as per the Inquests Act and National Health Act 2003.*
- *To establish the mechanism of death.*
- *Establish other relevant information which may in the considered opinion of the medical/investigating officer become relevant or important at future legal/administrative proceedings. This will include the timeous and appropriate harvesting/collecting of specimens and other evidence as deemed appropriate.*
- *Facilitate the categorization of the death as being homicidal, suicidal, accidental, natural or undetermined.*
- *Facilitate the accurate identification of the body, utilizing special procedures where necessary."*

Background in relation to forensic medicine is that although it was previously administered under the auspices of the South African Police Services (SAPS), since 2006 it has fallen under the authority of the FPS of the Department of Health. All the forensic mortuaries now fall under the FPS and the National Health Act (NHA) (Act 61 of 2003) outlines the structuring of the provincial services as well as regulations and guidelines.

For me a Latin phrase that summarises in three words the foundational obligation of forensic medicine is *veritatem dicere*, that is, directly translated: "tell the truth". In all the ethical dilemmas mentioned in the thesis that pertain to forensic medicine this moral norm of truth is paramount. It is the skeleton onto which the entire forensic medicine domain is built.

In accordance with the Inquests Act (Act 58 of 1959) in any death where unnatural causes are suspected, an inquest is mandatory. This Act also deals with the duty to report deaths if any suspicion by any person exists of foul play or unnatural circumstances surrounding the death.

As the domain of forensic medicine walks hand in hand with the legal domain of the Department of Justice the importance of the law cannot be separated from forensics.

- According to the National Health Act (NHA) (Act 61 of 2003) and set out in The National Guidelines of Forensic Pathology Practice in South Africa (2007, p.7) “*deaths due to unnatural causes include:*

- a) *any death due to physical or chemical influence, direct or indirect, and / or related complications;*
 - b) *any death, including those deaths which would normally be considered to be a death due to natural causes, which in the opinion of the medical practitioner, has been the result of an act of commission or omission which may be criminal in nature;*
 - c) *any death as contemplated in section 56 of the Health Professions Act, Act 56 of 1974 [Now Health Professions Amendment Act]*
 - d) *Where the death is sudden and unexpected, or unexplained, or where the cause of death is not apparent.”*
- According to the Health Professions Amendment Act (Act 29 of 2007) procedure-related deaths also need to be investigated by forensic medicine. More detail regarding the laws will follow in chapter 5.

A full medico-legal investigation includes a crime scene investigation, full external examination of the body or remains (i.e. post mortem examination), including recording of identifying features. Further examinations can include an autopsy (i.e. examination of internal organs), special dissection techniques and appropriate sampling of specimens as necessary for special laboratory investigations, and can include blood alcohol and other toxicological, microbiological, and ballistic investigations if needed.

Clinical forensics is a field in medicine dedicated to forensic investigation in patients that are still alive. These primarily deal with rape survivors, prisoners' health, drunken drivers, deoxyribonucleic acid (DNA) collection, confessions, and such related matters. This will not be the focus of the thesis. Both fields of forensic medicine aid in assisting the judicial system in making valid conclusions in civil and criminal proceedings so current laws can be fairly adhered to. One of the functions of both these professions includes attending court as an expert witness when summoned. It is noteworthy to say that a forensic pathologist can also assist in clinical forensic work, and vice versa, if the need arises, as in many smaller and rural communities where the two forensic fields cannot be separated. Many countries around the world have forensic doctors that do both pathology and clinical work. For the remainder of the thesis if I refer to forensic medicine it is coupled with the pathology leg of forensics, unless otherwise specified.

1.3 Why ethics?

Philosophy, ethics, and morality all seem very similar at first glance. To better understand ethics, one needs to understand the connection of ethics to philosophy and morality. Let's briefly look at philosophy first. Philosophy has been around for centuries. According to Van Niekerk, philosophy “*is reflection on concepts and ideas*” (ed. Moodley, 2011, p.9). Concepts refer to identification and classification of things. The concept of a chair or dog, for example, in various forms is concrete. But, the concept can also be abstract; such as life or God or politics. Van Niekerk provides a simple definition of philosophy as “*how and what we think*”, as well as reflection on “*thinking about thinking*” (ed. Moodley, 2011, p.8).

Ethics is the outcome of the reflection of philosophy. Ethics according to Beauchamp and Childress is a way of “*understanding and examining the moral life*” (2013, p.1). In a basic pictorial way ethics can be seen as a branch and philosophy as the tree trunk. If ethics is a way of interpreting morality, then that leads us to the next question of what the moral life or morality then is. Again, Beauchamp and Childress explain that morality refers to norms about right and wrong human conduct that are accepted by most stable societies (2013, p.2-3). Thus, morality can be seen as guidelines or ways people behave, which is then regarded by that society as right and wrong.

A well-known author, academic, poet and novelist of over thirty books, C.S. Lewis, wrote about a variety of subjects including meaning of life, pain, and religion. The fictional books he is especially well-known for is *The Chronicles of Narnia* series. He was also known for his philosophical work. In one of his Christian apologetic writings he touched on this subject of common morality among humans which is worth quoting, “*First, that human beings, all over the earth, have this curious idea that they ought to behave in a certain way, and can’t really get rid of it. Secondly, that they don’t in fact behave in that way. They know the Law of Nature; they break it. These two facts are the foundation of all clear thinking about ourselves and the universe we live in.*” (1989, p.7)

The ethical arena is complex to say the least and in our current societies many have rejected a theistic (God-ordered) set of rules that can be imposed to get a general sense of morality (Plueckhahn and Cordner, 1991, p16). Even with the lack of a uniform religious or spiritual commonality I do think there remains a generalised concept of morality that most humans still, predominantly unconsciously, adhere to.

As stated by the authors Beauchamp and Childress (2013) and C.S. Lewis (1989), we can deduce that most people have a generalised sense of what is right and what is wrong behaviour. This brings us to a mutual morality, also referred to as the “*common morality*”, which is regarded as the standard for moral behaviour, and can be used by human beings to gauge the behaviour of other human beings. An example of this common morality is not to kill or not to steal, as this is regarded as wrong, whereas telling the truth is regarded as right.

Ethics can also be regarded as moral philosophy: the quest for finding a justification for establishing what is right and wrong. Biomedical ethics is again a smaller branch off the main branch of ethics and has to do with the biomedical profession specifically. It concerns the process of deliberating about moral decisions in the health care sector. To help the health care profession with ethical decision making, numerous ethical theories have been shaping the way of thinking. A few of the universal philosophical theories include Utilitarianism, Kantianism, Virtue ethics and Right’s theory. I will briefly look at some of these theories in relation to the biomedical field and specifically as applicable to forensic medicine in chapter 4. I will then explore some of these theories with the purpose of finding a framework that could help to analyse ethical dilemmas in forensic medicine. In the last century, the Belmont Report and the principlist framework, outlined by Beauchamp and Childress in “*Principles of Biomedical Ethics*”, have also helped to shape the biomedical ethics sphere tremendously to make ethical decision making more applicable to “modern” medical dilemmas. In my fourth chapter I will briefly explore Principlism in relation to forensic medicine as a plausible model for exploring ethics in forensics, as opposed to some of the above-mentioned theories.

1.4 Aim of thesis

The question that started my thesis was, *do ethical issues exist in the field of forensic medicine in the South African context, and what are some of these issues?* The question following from the first is, *if there are ethical issues, how can they best be identified and explored?*

These questions are again brought up in chapter 3, where I explore some of the ethical issues commonly raised in forensic medicine in the literature; and in chapter 4, where I search for an ethical framework in forensic medicine. The obvious, simple answer to the first question is yes. This was already illustrated from the introductory example of Steve Biko, where the ethical issue surrounding dual loyalty was clearly illustrated. The one “loyalty” of forensic pathologists is with the state. The other loyalty lies with the patient, or rather the deceased (as is the case of forensic pathology).

The dual loyalty was apparent in the Biko case where the doctors responsible for initially treating Biko were under the prison authorities as District Surgeons, and their other responsibility was with the detainee, Mr Steve Biko. The official autopsy report only stated that he died due to “*application of force to the head*” (Mangu, 2012, p.263). This example demonstrates that any doctor, including the forensic doctor, should not be coerced, consciously or unconsciously, into arriving at a conclusion in favour of the state and the authorities appointed by it, such as the police or prison authorities, as in the case of these doctors. They should not have been intimidated or threatened to ever compromise their professional integrity and substitute the comfort of non-conflict for justice. It is fundamental that the forensic doctor should act independently and objectively arrive at the conclusion of each case, free from outside intimidation and threats or even promise of compensation. The road of higher morality may initially be difficult.

This was the case of Dr Wendy Orr. She did not fall into the trap of *status quo* at the apartheid time while practicing as a young district surgeon in Port Elizabeth in the 1980’s. Her role as district surgeon at the time required her to be involved in medico-legal and health aspects of prisoners. Her ethical dilemma of dual loyalty was well summarised by Lesley London in *Ethics, Law and Human Rights* (ed. Moodley, 2011, pp.100-101). She encountered multiple cases of police assaults of detainees in custody on par with torture and decided to take matters further. She was met with much resistance from her immediate superiors (interestingly, one of her superiors was a doctor also involved in the Steve Biko tragedy), but she decided to appeal to the Supreme Court to intervene. Her amazing tenacity was rewarded years later when she was appointed as a commissioner in the Truth and Reconciliation Commission.

Recent examples of dual loyalties in forensic medicine include when the perpetrator in the case is the State itself, such as if a police officer fires at a culprit in an attempted robbery and the culprit dies. Any death in custody also needs to be investigated independently because of this ethical issue at hand. The dual loyalty dilemma was part of the motivation for the Independent Police Investigative Directorate (IPID) Act, effective as of April 2012. I will elaborate more on this act in Chapter 5.

These introductory examples demonstrate why the forensic doctor needs to act according to the highest of ethical standards, as the conclusions derived can have long lasting impact on families and on individuals’ liberty and lives. No one wants a serial killer being acquitted because of a wrong or manipulated conclusion derived upon. Neither is it ethically tenable for an individual to serve a life-time imprisonment sentence because of wrongful interpretation by the forensic doctor. It is my opinion that of all the medical sub disciplines the forensic doctor has a tremendous responsibility to impact the lives of suspected individuals, victims, families, judicial outcomes, insurance/compensation and even health policies. Every field in medicine has ethical challenges but the field of forensic medicine is more unique and complex. The function of forensic pathology was briefly addressed above. Despite being a relatively small field within medicine, the ethical challenges faced within the field of forensic medicine are vast. These multiple challenges incorporate many role players ranging from the deceased and their families; forensic doctors to lawyers; communities to police. The governance of the state over forensic medicine is complex and

results in the overlap of oversight since forensics deals more directly with the different domains within the government than any other field of medicine, including the Department of Health, Department of Justice and Department of Home Affairs, to name but three important ones.

I find the idea of an old-fashioned clock, complete with its many interlinking cogs and gears, a useful way to illustrate the concept of forensics. The domain of forensics, as illustrated above, deals directly with the deceased. This is the whole pivot around which the intricate clock revolves. Without the deceased in the picture none of the other role players would be involved. This is exactly why I have dedicated the second chapter to the deceased. The importance of emphasising the moral significance of the deceased is the foundational starting point for this philosophical thesis. Without this underpinning of moral significance to the deceased we cannot move forward in exploring a framework for analysing ethical issues in forensic medicine.

This brings me to the second question of how to identify and best illustrate these ethical issues in the field of forensic medicine. The issues must be identified before they can be appropriately addressed. No formal framework currently exists to address the complex ethical terrain of forensic medicine, as far as I could tell from my literature search. In the fourth chapter, I will explore some of the well-known philosophy theories prevalent in the biomedical field and briefly unpack them in the context of forensic medicine.

The goal of a framework will be to have a good and reusable model that can identify ethical forensic issues so that these issues can later be addressed. The thesis will not deal with the solving of identified issues. The focus of the thesis is to try and identify a platform from where future addressing of the issues can develop and professional practice in forensics be enhanced. The possible end goal of the thesis can be to influence ethical policies and conduct guidelines in the field of forensic medicine in South Africa.

1.5 Brief chapter overview

This introduction has served as an appetiser to the main course to come. The challenge I will undertake in the next chapter is the exploration of the deceased's moral status. The aim is to illustrate that the deceased has moral significance, which subsequently leads to the rest of the thesis' importance. Without moral significance, the deceased in the forensic medicine context cannot be deliberated about in an ethical/moral sense. I delve into the concept of death and explore the importance, if any, of the deceased as a moral agent. Questions such as: 'Does the deceased matter?' and 'What worth or value can one attach to the deceased?', will be explored. The deceased is important as one of the primary role players in forensic medicine. If the deceased can be shown to have moral status, the importance of moral philosophy in the forensic medicine sphere, and the need for further analysis of a framework to explore these ethical issues, is reinforced. If the dead have no moral worth, then this thesis, and indeed exploring ethical issues relating to the field of forensic medicine, is in vain. This important philosophical deliberation will be the starting point of the thesis. This will set the stage for the search for an ethical framework that could assist in exploring ethical issues in forensic medicine.

The third chapter starts to focus the attention of the reader to the ethical dilemmas that can be encountered by the forensic doctor in the South African context. This chapter is a response to my initial question that started the thesis, namely, "*do ethical issues exist in the field of forensic medicine in the South African context, and what are some of these issues?*". I could not identify much literature *specifically* related to ethical issues in forensic medicine or forensic pathology in South Africa. Many of the issues in forensics, such as the dual loyalty case of Biko, are not unique to South Africa which resulted in widening of my search to consider international literature as well.

Literature in the forensic sciences and in anatomical pathology was also explored; some of these ethical deliberations could be extrapolated to forensic pathology as well. I also realised that few have attempted to write about the already deceased individual in an 'ethics-considering' manner. The good thing about the lack of specific literature dealing with philosophy and ethics in forensic medicine, is that this indirectly illustrated a need of ethical deliberation.

In the fourth chapter of the thesis I evaluated possible frameworks and theories that could aid in the ethical discussion related to forensic medicine. The lack of existing, specific ethical frameworks for the moral exploration related to forensic medicine led me to briefly explore some of the better-known theories in philosophy such as *utilitarianism* and *deontology*, as well as other frameworks and approaches in bioethics that originated in the latter part of the 1900's, such as *liberal individualism* and *casuistry*. I examined some of these in light of applicability to the forensic medicine sphere, as well as to our multi-cultural South African context. This was indeed no easy task. I ended the fourth chapter with the justification of why I chose to use the principlist framework for this specific thesis. Each of the four principles of *principlism* will subsequently be explored in forthcoming chapters; namely, justice, beneficence, non-maleficence, and respect for autonomy.

As the law is intricately linked to the field of forensic medicine, the next three chapters look at the details of the principle of justice in relation to the chosen framework. In chapter 5 the laws related to forensic medicine in the South African context is expanded upon in detail. All the laws are briefly summarised and specific ethical issues possibly resulting from the laws are considered. The important difference between law and ethics and the statement I explored earlier regarding not all laws always being ethical, is illustrated and explored in this chapter. Thus, this chapter will focus on the aspect of legal justice.

The next two chapters (chapters 6 and 7) also explore concepts of the law but under the auspices of rights-based and distributive justice. In the sixth chapter exploring the rights-based justice approach, I will focus on the deceased as also having basic human rights. The three rights I will explore is the deceased's right to identification, a fair trial and lastly confidentiality. Certain socio-economic factors will then be explored in the distributive justice chapter that will show how forensic medicine is affected by and affects South African society. Our country has numerous middle- and low-income communities interspersed with high income communities.

Chapter 8 will highlight how the two principles of beneficence and non-maleficence have a role to play in the field of forensics. I will specifically use examples related to harm. Initially I will explore the concept of doing good as related to the deceased and then also the greater society. Lastly the concept of not harming will be discussed in relation to dual loyalty, research, and the deceased, and lastly the media's role in forensics related to harm.

Before my concluding remarks in the last chapter, I explore the concept of the deceased and the principle of autonomy. This will be done by utilising the concept of symmetry. I will look in more detail at the confidentiality aspects related to the deceased and consent issues with the limits posed by each.

Chapter 2: Why the dead matter: a philosophical analysis of the moral status of the deceased

In the introductory chapter, I briefly touched on general aspects regarding forensic medicine and showed that ethical issues do exist in this special field of medicine. At this point in the thesis, prior to further ethical reflection, I must first demonstrate that the deceased is an entity with moral status that deserves moral deliberation. If I can ascribe importance to the deceased on philosophical grounds, this will underscore the importance of exploring ethical issues related to them in forthcoming chapters.

In this chapter, I will also explore the deceased in the context of a consideration of both moral concern and moral rights. It may sound absurd to talk about rights and the deceased in the same sentence but let us look at this more closely. Does one relinquish rights when you die? Where does one draw the line between rights of the living and rights of the dead? Do deceased individuals have the same value and worth as living individuals and thus qualify for the same rights? Do some rights cease when one dies? I will argue that the deceased are worthy of moral concern and should be accorded a limited set of rights, including the right to privacy and the right to have ante-mortem desires respected, unless these infringe on the rights of others.

The above questions pertain to the ethical concept of moral status. I will briefly unpack the concept of moral status in this chapter as related to the deceased. An entire chapter is devoted to moral status in Beauchamp and Childress' *Principles of biomedical ethics* (2013, pp.62-100). Moral status signifies the possession of moral significance. In other words, if you have moral status/standing it means you matter morally and qualify for the fulfilment of certain obligations towards yourself.

Beauchamp and Childress touch on some of these questions: "*The problem of moral status begins with questions about which individuals and groups are, or should be, protected by moral norms. For example, what are we to say about human eggs? Embryos? Human embryonic stem cells? Fetuses? Newborn infants? Anencephalic babies? The mentally disabled? ... The brain dead? Cadavers? Nonhuman animals used in medical research? ... Do the members of each of these groups deserve protections or have moral rights? If so, do they deserve the same complement of protections and rights afforded to humans? If not, what elevates normally functioning humans above members of the groups just listed?*" (2013, p.62).

Mulgan (1999) expressed similar sentiments about establishing moral standing of the deceased in an article addressed to the liberal political society in New Zealand, in which the dead are not considered to have moral standing. This was significant from a New Zealand cultural perspective as well, as the Maori culture regarded the deceased to have moral standing as equal to those of the living (p.52). Mulgan challenged their liberalism's impartial standing towards the moral status of the deceased in relation to equal treatment of all people, including for their religious beliefs (p.56). The indigenous Maori believed that, after you died, you did not cease to be a decision maker, i.e. you have moral standing based on how the still living acknowledged your after-life existence. The Maoris' beliefs about the continued moral standing of the deceased can be extrapolated to some of our own traditional indigenous South African cultures. In many of the traditional African cultures, ancestors continue to be an integral part of their living society. Thus, cultural perspectives also need to be addressed regarding moral status, as part of my philosophical analysis of the question: *why do the dead matter?*

My hypothesis is that, if the deceased can be shown to have any moral standing, then it is also fair to attribute some limited rights. The equation is simple: if the deceased has moral status, then

moral agents should protect this status within moral norms. These moral norms of protection can be seen as obligations towards the deceased's rights. These statements are very important and will be further explored.

It is very difficult to place the deceased in a specific group related to moral status. Unfortunately, the history books are full of examples of dehumanising acts based on differences in perceptions of status related to religious, gender, racial, sexual, and intellectual distinctions among people. Many cases in history have illustrated that people who are regarded as inferior in moral standing, for whatever reason, have had fewer rights attributed to them, and abuses of human rights have then flourished. Many societies today still embody these very prominent ideas about differences in moral status. For example, we see gender influencing moral status in strict Islamic nations like Afghanistan in the Middle East. In Afghanistan, the moral status of woman is considerably less than that of the males in the country (Moghadam, 2004). This difference in moral status between the two genders is due to many complex social, religious, and state reasons, as explored by Moghadam (2004). However, some first world and politically advanced nations have also shown a distinction in distributing moral status to people. For example, the research performed (often without restriction in the past) on prisoners who have limited rights, where their liberty has been regarded as secondary to their incarceration (Tarborda and Arboleda-Flòrez, 1999).

I will briefly mention five postulated arguments related to attributing moral status in the philosophy context. Two of these arguments, and a modified third, can be utilised for the deceased's defence to moral status, as I will demonstrate in this chapter. I will then consider how cultural and religious viewpoints can be significant contributors to the status of the deceased, before finally exploring the concept of symmetry.

Beauchamp and Childress postulate five arguments to address the idea of moral status in their *Principles of Biomedical Ethics* (2013, pp.64-79). No one of the arguments is more important than the other, as each considers a different dimension in relation to the moral status deliberation. In other words, all attempt to bring a different perspective, although none can claim to be encompassing. I will briefly mention these five arguments and attempt to apply them to the deceased person.

- Human properties:
This argument attributes moral status to any agent with human species properties. Any being who has the human genetic code at its core is regarded as having moral status, based on being a *Homo-sapien*. This is a very encompassing argument based on an easily identifiable, unbiased method if one stays within the human species. If you can be identified as human, then you can have human rights attributed to you. Obviously, the deceased can have moral status attributed based on being a human.
- Cognitive properties:
This argument attributes moral status to any agent with higher cognitive abilities, i.e. agents with mind process abilities such as thoughts, ideas, beliefs, recognition, and such. This argument is not exclusive to the human species. The argument also has gradations, namely from lesser cognitive abilities, such as awareness of self, to higher rational abilities. The moral status of an individual can increase or decrease depending on their cognitive capability. This argument may limit moral status attributable to humans lacking in higher cognition, such as infants and senile adults. Due to the lack of the deceased to cognitively interact, this argument will not add moral status to the deceased.

- Moral agency:
This argument attributes moral status to any agent that can make moral decisions. That is, if an individual can distinguish between right and wrong or is motivated by a higher morality, then moral status can be attributed. Many people incapable of moral capacity, such as dementia patients or brain damaged individuals, are not regarded as having moral agency and thus moral status. Vulnerable people such as the very young or mentally unstable, who cannot decide for themselves or test their motives, cannot get status consideration with this argument. At first glance, this argument does not seem to aid the moral standing of the deceased. However, I will illustrate below that this argument can be applicable to the deceased; for example, in the case of a living will.

- Sentience:
This argument attributes moral status to any agent (example human and animal) that is capable of emotional expression, especially in relation to suffering, pain and pleasure. This argument is not species specific. At first this seems like an encompassing argument, as many are included under the umbrella of sentience; however, on closer inspection this is not the case. What about the severely brain damaged individual, incapable of expressing pain experienced? Does this warrant causing pain to their bodies as they are not regarded as having moral status due to lack of sentience? Of course not. For obvious reasons, this argument excludes the deceased, as no pain can be experienced or expressed.

- Relationships:
This argument attributes moral status to any agent that is in relationship with others. This relationship is based not only on social interactions, but also on roles and obligations. Protection is an outflow of established social relationships. This theory can therefore also attribute moral status to the deceased, as the deceased in most cases is bound by established social relationships. The deceased's loved ones that are left behind after death aid in this theory's significance in moral status to the deceased.

It is apparent from the above-mentioned arguments regarding moral status that two arguments are significant in consideration to the deceased: the human properties of the deceased and the significant social relationships of the deceased to their loved ones. The third argument that can be applicable, in a modified way, is that of moral agency, which I will explore below. Not all the above-mentioned arguments need to be applied for the deceased to have moral status and some limited rights.

2.1. Human properties of the deceased

The deceased individual, especially recently after demise, is still recognisable as human in external appearance. Beyond the physical attributes of the deceased that are like the living individuals, genetic human properties are even still existent in the decomposed deceased. This is reason enough to attribute moral status to the dead person, based on the moral argument of human properties. Beauchamp and Childress quote from a statement from two members of the President's Council on Bioethics. The portion that stood out for me was this: "*[if] as humans they are intrinsically valuable and deserving of full moral respect in virtue of what they are, it follows that they are intrinsically valuable from the point at which they come into being.*" (Beauchamp and Childress, 2013, p.66). Within this statement, and others to follow, lies a reality that the deceased is irrevocably linked to the human species on the mere basis of being born a human. Bound up even further in this idea is the individuality and worth attached to being human, regardless of sex, age, or race.

Brecher goes beyond merely the human species and human DNA to observe that we do not look the same way at a dead person as a dead animal. He mentions that we often speak of *dead people*, referring to the individualistic aspects of what made that person unique, as opposed to “*dead human beings*” which is more a species term (Brecher, 2002, p.114). He continues to explain this concept of a continuity from the once living person and now dead person: “*I do not think it is going too far to say that in some ways you do not cease to be a person after you are dead; and to the extent that you remain part of a community, you remain a person, even though a dead person*” (Brecher, 2002, p.115).

Baglow agrees with this sentiment, stating that the newly deceased initially starts out “*looking as much as possible as it did in life*” (2007, p.229); the person of the external image is the same as that of the person that died. Therefore, people find it difficult to see the “person” as dead in a clinical sense as the “*identity is attached to the body*” (Baglow, 2007, p.228). The “*individuated*” aspect of the newly dead is also mentioned by Tomasini (2009, p.448) and Haddow (2005, p.109). When we die, we (initially, at least) still have the same outward appearance as we had when we were alive. This is one of the reasons, which I will explore in another chapter, why caution must be exercised in the way an autopsy is performed. Care must be taken to not deform the corpse if it can be helped (Christison and Hctor, 2007). Tomasini also argues that “*dismembering the corpse post-mortem, can affect how the ante-mortem person is remembered*” (Tomasini, 2009, p.447).

When we apply this argument of human properties to the deceased individual as a pre-requisite for moral status of the deceased, then the deceased can be considered for moral status since the dead person has distinct human properties, within the human species. This can be verified by DNA analysis if the outward features of a person are not recognisable, as in the case with decomposed bodies or very premature fetuses. Obviously, the outer aspects will deteriorate over time, but will still be human. Even when only bones remain, our skeletal structure is very different from that of animals. That is why skeletal remains in open fields or mass graves can be forensically investigated to try and determine not only cause of death, but also the identity of the deceased (De La Grandmaison *et al.*, 2012, p.211; Matejić and Otasević, 2010, p.776; Nuzzolese, 2012, p.54; Thomsen, 2000, p.572).

This argument is also broad in its application as it covers everyone, humanly speaking. I will not explore exclusions such as genetically engineered human-animal chimeras, which do have some genetic properties of humans. The difference to me here is in the “personhood” that makes a human a human. I acknowledge that personhood is a widely contested concept (for example, see Beauchamp and Childress, 2013, p. 68), but unfortunately an in-depth discussion of this is beyond the scope of the thesis.

As humans, we have our own identities linked to other humans, including those who have died. My point is that by treating the deceased with respect, we mirror our own frail humanity. As Brecher says, “*denying the dead is to deny in some measure our own identity*” (2002, p.110).

Let me end this discussion of human properties with an apt quotation from *The Immortal Life of Henrietta Lacks* (Skloot, 2010). This biography tells the intimate story of Henrietta Lacks, who died of cervical cancer at a young age. Cancerous cells harvested were successfully kept “alive” after her death. Her cell line became ‘immortal’ and is known as HeLa cells, and this ‘immortal cell line’ is still relevant scientifically today. The quotation is related to a section that details the autopsy of Henrietta Lacks. The pathologist, Dr Wilbur, and his assistant, Mary, were busy taking samples of organs for further investigation: “*Mary stood beside Wilbur, waiting as he sewed Henrietta’s abdomen closed. She wanted to run out of the morgue and back to the lab, but instead, she stared at Henrietta’s arms and legs – anything to avoid looking into her lifeless eyes. Then Mary’s gaze*

fell on Henrietta's feet, and she gasped: Henrietta's toenails were covered in chipped bright red polish. 'When I saw those toenails,' Mary told me years later, 'I nearly fainted. I thought, Oh jeez, she's a real person. I started imagining her sitting in her bathroom painting those toenails, and it hit me for the first time that those cells we'd been working with all this time and sending all over the world, they came from a live woman. I'd never thought of it that way.'" (Skloot, 2010, pp.90-91).

2.2 Relational considerations

Most people living today are connected to other people in some way or other. Most have, at the very least, a family of origin to refer to and other existing social relationships. The well-known saying "no man is an island" is apt. Apart from the familial relationships that attach people to each other, there are also friendships, community relationships and professional relationships. The theory of relational considerations does not discriminate against any specific preference of relationship, i.e. regarding any social interactions. For this discussion, however, the primary reference to relations of the deceased will be familial. There may be some friends that are closer than brothers, but for the most part the people that usually know us best are our family. Even the law recognises the special bond within family structures. We see this in the hierarchy when consent is required. For children, the parents or guardians are most important, for a married person their spouse and thereafter adult children or siblings, and so forth. It is because of these relationships that a deceased can be regarded as having moral status when using this theory.

An article written by Nuzzolese (2012), concerning the identification of missing persons, is pertinent here. Special mention was made to the current migration and refugee crisis in Europe, which is not improving. This obviously leads to a whole myriad of problems, of which one aspect is missing people and unidentified bodies. Nuzzolese says: "*A missing person may be either alive or dead, but for the families the uncertainty will continue until the body is recovered. This condition of uncertainty is considered to be equivalent to 'torture' and endless mourning*" (2012, p.52). What is evident is the intense emotional trauma that is attached to not knowing. Even though this does not specifically refer to a relationship with a deceased family member, merely a missing family member, it does emphasise the strong emotional ties that are inherent to families.

Various articles make mention of remembering and keeping promises, of being bound by these, even after death (Baglow, 2007, p.230; Brecher, 2002; Nelkin and Andrews, 1998, p.261). Why do we feel obligated to fulfil the promises made to the deceased? I propose that it is exactly this relational aspect that binds us together as humans. Brecher states it as such: "*obligation is inescapably relational*" (2002, p.111). The familial obligation was also emphasised by Baglow (2007, p.236). To a certain degree even the will of the deceased relies on the premise of relationships to fulfil the wishes stated in the will.

Haddow interviewed nineteen organ donor families about their ideas around death, the deceased, and their bonds to the deceased (2005). One of the comments Haddow made about the concerns of two mothers related to their perceived continued relationship with the dead is worth mentioning here: "*What they shared was a continuation of the maternal role that they had had with deceased and the emphasis therefore is on the previous relationship with the person and not the representation of their body.*" (2005, p.107). The mothers felt like they had abandoned their children when they left them at the hospital, a feeling which was heightened by not having been nearby when their child's organs were removed for donation. Haddow noted that even though the donation of organs was itself dependent on death, this did "*not mean the termination of the relationship with the previous embodied self*" (2005, p.109).

What these examples demonstrate is that the relationship between the living and deceased continues to exist in an unseen bond. This relational bond leads to obligation. We saw earlier that Brecher noted the obligation of promise-keeping (2002, pp.111,114); a further obligation he discusses is that of remembrance (2002, pp.115-118). He relates this relational obligation of remembering even further than mere familial acquaintances, but to anyone who may have contributed in a significant way to what the “community” is. Examples such as war veterans, freedom fighters against the apartheid regime, and abolitionists of slavery were used, as these indirectly contributed to making him (Brecher) who he is (2002, pp.116-117). We see the importance of remembering also in monuments, and in culturally important rituals and remembrance days (Baglow, 2007, pp.230,235), which I will discuss in the next section.

Within this context, I feel it important to mention a specific ethical issue that happened at the turn of the previous century. I am referring to the Alder Hey affair, as it is known in the media. The central issue of this controversy revolved around children’s organs that were kept after autopsy without parental awareness or full consent. The parents did consent to an autopsy, but not the removal and keeping of the organs for further educational or research purposes, as was done. This case was a landmark case in England and further afield. It highlighted weaknesses in the paternalistic Human Tissue Act that did not require consent for such actions. Parents could object, but no one knew what they should object to in the first place, as they were not asked if they objected to organs and tissues being kept for additional purposes (Arcus and Kessel, 2002, p.1493; Burton and Wells, 2001; Evans, 2001, p.825; Jones, 2011, p.20; Wilkinson, 2002, pp.31-32).

Why is this important in my analysis of moral status of the deceased? The reason is nestled in the relational aspect of post mortem harm. The emotional bond that was there prior to death is not suddenly severed. Post mortem harm can be best summarised as harm that happens after death. In other words, due to the relationship the living had with the deceased, they can be wronged after death. We are not referring to harming the dead but harming those living family members by the way the deceased’s body is handled. *“While death marks an irrevocable change in status from an existing to non-existing subject beyond all experiences, the fact that the dead were once existing/experiencing subjects of life matters in respect of what harm may mean.”* (Tomasini, 2009, p.443).

The question, then, is not merely if the dead can be harmed, but if the living survivors can be harmed by the way their loved ones’ bodies are treated after death. This can be better understood by looking at what has been called *Cambridge changes*, a term coined to try and explain this concept. An example is of a man who dies (i.e. post mortem), which causes his wife to become a widow (relationship change to an ante mortem person). *“It marks a shift in the experience of the living in relation to the dead”* (Tomasini, 2009, p.444). The mourning associated with this process results in very specific ideas, feelings, beliefs, and expectations as to what should happen to the body of the deceased loved one (Jones and McCullough, 2011, p.880; Nelkin and Andrews, 1998, p.277; Tomasini, 2009, p.444).

What was interesting in the whole Alder Hey affair, was that the harm only existed once the parents became aware of the matter. The fact the organs taken were hearts and brains (emotive organs) was what was most disturbing to the parents. This made them feel like their children were not “whole” (Arcus and Kessel, 2002, p.1493). The mother of one of the Alder Hey children mentioned that *“the memory of her child has been ruined by living under the illusion that he was buried intact when in fact he was missing his heart. She cannot even look at pictures of him now because she just sees him in a different way”* (Tomasini, 2009, p.447).

It seems, then, that the type of organ itself also plays a role, many authors referring to “*emotive organs*”, mostly being the hearts and brains, sometimes kidneys as well (Evans, 2001, p.825; Jones, Gear and Galvin, 2003, p.346), or even the eyes (Haddow, 2005, p.109). The heart, as an emotive organ, played a role in the Green Lane Hospital’s ‘heart library’ (Jones, 2011, p.20; Skegg, 2003, pp.425-426), where more than 1300 children’s hearts with congenital defects were kept. I found it fascinating that during approximately a thirty-year period in England, until the end of the millennium, over 50 000 organs and fetuses were stored for mostly educational purposes, with almost half of them being brains (Burton and Wells, 2001, p.820). Organ removal is also a sensitive topic that can cause harm to certain religious communities. This is especially true of Orthodox Jews (Rosner, 1979)².

In our own country, there are also cases of post mortem harm. One case involved a gravedigger who, after the burial, dug up an infant and chopped off a portion of the deceased infant’s face. In his summation, the judge referred specifically to the harm caused to the infant’s still living family due to this inhumane act: “*a gross outrage to the feelings and sensibilities of the relatives of the deceased child*” (Christison and Hoor, 2007, p.31).

Nelkin and Andrews mention a few cases where post-mortem harm also occurred (1998). One such case involved the illegal selling of organs after autopsies, which became known in 1991. The relatives were not initially aware of this, and the discovery resulted in much grief for the relatives (Nelkin and Andrews, 1998, p.285). They also mentioned Henrietta Lacks, who I referred to above (1998, p.278). In fact, I propose that the entire book Skloot wrote about her is fundamentally important, as it highlighted the post-mortem harm caused to the Lacks’ family. By using her cells initially without the family’s cognition and continuing to use them even after the family had found out (Skloot, 2010). Henrietta’s husband is quoted as saying, “*as far as them selling my wife’s cells without my knowledge...I don’t like that at all. They are exploiting both of us.*” (Nelkin and Andrews, 1998, p.278). We can clearly see how Henrietta’s husband’s response shows the harm he was still experiencing; he even attributed perceived “harm” to the deceased. Nelkin and Andrews mention quite a few other significant cases which I will refer to in my later chapter on beneficence and non-maleficence (chapter 8), as some have medical legal associations. What I would like to emphasise here is that there wasn’t a cut-off time limit to post-mortem harm. Many of the above-mentioned examples show the post-mortem harm only occurred years after the actual incidents happened, such as with of the Alder Hey affair, the Green Lake heart library, and Henrietta Lacks. I will mention some cultural and religious examples in the next section which will further illustrate this matter.

2.3 The deceased as a moral agent

What do I mean by moral agent? This refers to a person that can make moral decisions; whether these choices are virtuous or immoral decisions is irrelevant. In other words, a person is a moral agent when they can form an opinion about the good and bad, right, or wrong of any action. The second important aspect of a moral agent is that their reason for acting in a certain way can be evaluated by another. Basically, this means a moral agent can distinguish between right and wrong and thus the motives of an action can be judged (Beauchamp and Childress, 2013). When considering attributing moral status based on the argument of moral agency, any agent that can make moral decisions can be considered. As mentioned in the summary of the arguments above,

² Orthodox Jewish views on body wholeness is explained in more detail on pages 32-34 of the thesis.

this argument initially seems to be unsuitable to the deceased. The obvious reason would be that the deceased cannot express moral decisions and thus act as a moral agent.

Moral agency is considered to be an adequate condition of moral status. Key to moral agency is the capacity to act autonomously; thus, moral agency “occurs if and only if one knowingly governs oneself in accordance with universally valid moral principles...Moral agents are the paradigmatic bearers of moral status. They know that we can condemn their motives and actions...”

(Beauchamp and Childress, 2013, p.72)

At stake, then, is whether the deceased can be considered to be morally autonomous. I briefly argue that, in a modified way, the deceased can be a moral agent in as much as ante-mortem autonomous moral decisions were made. By this I mean decisions and wishes made before death can in fact “speak” from the grave on behalf of the deceased. These wishes have a direct influence, on the living, even placing obligations on them. For example, if a living will was signed prior to death, or a decision made to donate one’s organs, these decisions were presumably made in the capacity of a moral agent. These decisions made ante-mortem carry weight even after death. As far as possible these wishes would need to be executed after demise.

Let’s look at the example of organ donation. When a choice was made to donate organs, this was based on a decision within the person that donating organs would be a good or virtuous action to undertake. This decision is made as a moral agent, and carries moral significance or moral standing, since the decision fulfils the first criteria of agency, namely that an opinion was held about donating organs. This decision can then be judged morally by others, as the second condition to be met. What is important about this example is that this decision by the moral agent to donate organs can, in most cases, only be fully executed after demise of the person. In rare instances, one can become a living donor, like donating one of your kidneys while still alive, but most of your organs can only be donated after death. This example illustrates that in a modified way the argument for moral agency can be applied to the deceased to attribute moral status.

Further discussion concerning the principle of autonomy will follow in Chapter 9, where I will focus on the importance of transferred moral agency. This includes living wills and ante mortem sperm or ova retrieval. This brief discussion here shows that moral agency can indeed still be used to attribute moral status to the deceased in a modified way. In *Taking DNA from the Dead* the authors commented on deceased individuals retaining ethical interest after death in having their “*bodies treated with respect and having their ante-mortem wishes upheld.*” (McGuire, Majumder, Halpern, Swindell, Yaeger, Gibbs and Wheeler, 2010). This comment alluded to harm that can be experienced by the deceased and indeed speaks of the retained moral agency of the deceased.

2.4 Cultural and religious importance of the deceased

Interestingly, our own traditional African cultural understandings and religious beliefs related to the continued co-existence of the dead with us, the living, is not unique to Africa. Many other cultures around the world have similar significance attached to the deceased individual. This was illustrated in Mulgans’s article, *The Place of the Dead in Liberal Political Philosophy*, about the native Maori population (1999). He explores the importance of the deceased from a liberal political point of view. He writes that the deceased should not be ignored in political discussions and be attributed status. Culture, as well as religious beliefs, plays a significant part in attributing moral status to the dead. The Maori culture, then has similar beliefs to our own traditional African cultures about the continued importance of the deceased to the living (Setsiba, 2012).

Brecher, in his article, *Our Obligation to the Dead* (2002), places the deceased within a social milieu from where obligation stems towards them. I would argue that all cultures tend to acknowledge and engage with the deceased in one way or another. Some, such as traditional African cultures, the Maori, and many Eastern cultures place ancestral significance on the deceased with regards to the still living. Other cultures, at least at a minimum, respect the deceased by giving them a proper burial within their religious and cultural wishes. I will explore some of these cultural and religious engagements with the deceased below, which in turn illustrates moral significance of the deceased, as related to their cultural context and religious beliefs.

The importance of remembering the culture of the deceased cannot be overemphasised, especially in this culturally diverse nation of ours. In the South African Constitution, specific mention is made to every individual's cultural and religious rights, in articles 30 and 31, of the Bill of Rights as:

“Language and culture- Everyone has the right to use the language and to participate in the cultural life of their choice, but no one exercising these rights may do so in a manner inconsistent with any provision of the Bill of Rights.

Cultural, religious and linguistic communities- Persons belonging to a cultural, religious or linguistic community may not be denied the right, with other members of that community- (a) to enjoy their culture, practice their religion and use their language; and (b) to form, join and maintain cultural, religious and linguistic associations and other organs of civil society...” (Government Gazette, 20 ss.30–31, p.1257).

Can we translate this constitutional requirement to the deceased? I propose that we can, the reason being our strong traditional cultures in South Africa, protected by law. Not only does the Bill of Rights regard language, cultural and religious aspects, but also dignity, and this extends to the deceased's dignity in the grave as well (Christison and Hooft, 2007, p.43). Herein lies the important factor to consider with regards to the moral status of the dead. We must take account of the cultural and religious aspects in the philosophical equation. *“No culture fails to engage its dead in one way or another”* (Baglow, 2007, p.230), especially in our nation with so many diverse cultures. In the discussion to follow I refer to examples of culture and religion interchangeably, since it is not always easy to separate culture from religion. In many cases religious beliefs can evolve into cultural aspects. This thesis does not, unfortunately, allow space to elaborate more on this statement.

The importance and moral significance attached to mourning rituals is a global phenomenon. As mentioned in the previous paragraph, many of South Africa's cultural groups, especially the African cultures, have very specific rituals pertaining to death. This was well researched and thoroughly discussed in Setsiba's well written dissertation, *Mourning rituals and Practices in Contemporary South African Townships: A Phenomenological Study* (2012). This South African dissertation contributed towards the cultural importance, and thus moral significance too, of the dead, by seeking to understand the traditional African practices that surrounded the mourning of an individual. She explored which traditions were important to uphold, but also how these have changed in the modern times of urbanisation. The importance of the deceased's continued role in the life of the living relatives as ancestors was also discussed.

Setsiba (2012) mentions that most mourning rituals occur in a similar fashion. The entire process of mourning involves various steps. It commences at death, continues to the preparation prior to burial, including different ceremonies such as cleansing rituals and prayers, followed by the burial and the ceremony thereafter. The process may look slightly different in way of expression from

culture to culture, but the underlying motive relates to the family and loved ones of the deceased being able to pay last respects to the deceased, as well as make peace with the fact that the loved one has died, through these different forms of public display. Setsiba mentions that the transition from life to death is also not a destination for many of the indigenous cultures of our country. The deceased continues to exist in a transitory way as they remain part of the living-dead or “ancestors”, as they are also known when they are venerated (Setsiba, 2012, p.2). The concept of continuation of life in the form of ancestors is significant when discussing the status of the deceased. These ancestors are seen to act as mediators between God and the living, an ongoing relationship as it were (Setsiba, 2012, pp.17-18).

What is interesting, and important, is that our indigenous cultures in South Africa are not the only cultures in the world which regard the veneration of ancestors and ancestral beliefs as important: “*Assisting corpses to reach the social space of the dead, therefore, is a duty that one must handle with tremendous care and precision. Hence the solemnity and complexity of funeral rites*” (Baglow, 2007, p.231). We see similar beliefs in the Eastern countries, such as Japan and China (Baglow, 2007, p.228), Maoris in New Zealand (Mulgan, 1999) and Native American cultures to mention but a few (Baglow, 2007, pp.229-231; Nelkin and Andrews, 1998, pp.269-272). Even ancient Roman culture had veneration aspects associated with death (Christison and Hctor, 2007, p.43). There is complexity of mourning rituals all cultures, as also mentioned by Baglow (2007, p.230). Brecher also refers to a transgenerational community of which we are all a part (2002, p.113).

In addition, some ancient cultures believed in the association between your intact, earthly corpse and the link to the afterlife. The Chinese, Incas, Greeks, Romans, and Egyptians are a few (Wilkinson, 2002, p.36). The extensively researched Egyptian culture with their tombs (known as sarcophagi) as an extension of this life to the after-life comes to mind. This is also why the Egyptians went to extremes to preserve the body, as it was believed that it would rise again after a period and the same body continue in the afterlife. The belief was that the longer your physical body, namely the corpse, could be maintained here on earth, the longer your afterlife would be. This explains why the Egyptians used extreme measures to preserve the body after death in the process known as mummification. The wealthier you were, the more elaborate and better your body preservation and your sarcophagus (the pyramids, as we know, being the epitome of importance for Pharaohs), the longer and more fulfilling your afterlife.

Is it then right for us to classify tombs as archaeological and do research on them, given the above beliefs? When does a cultural or religious belief end? Is there a time limit or shelf life to a religious or cultural belief pertaining to death? This is not for the discussion of this thesis, but still thought provoking, and a challenge to our ‘Westernised’ way of thinking about death and property rights, such as graves. I recall the article that Christison and Hctor (2007) wrote about the validity of criminalising a violation of a grave or dead body. If a grave and corpse can still be regarded to have legal assertion, as argued by Christison and Hctor, then what makes ancient tombs any different (Wilkinson, 2002, p.36)? Or any grave for that matter?

The research article by Nelkin and Andrews (1998) mentioned above was important and extensively used throughout my thesis. Much of their article demonstrated cultural and religious compromising issues. This is also the concern of Nelkin and Andrews in their article related to group research of remains within Native American graves (1998, pp.269-273). Research of the Native American remains were authorised by the American government in 1793, 1868, 1906 and 1979 again. The American Antiquities Preservation Act was passed in 1906 (with slight alterations in 1979) to classify all the “*Native American burial sites, funerary objects and human remains into ‘objects of antiquity’ and ‘archeological resources’ and thus federal property*” (Nelkin and Andrews,

1998, p.270). Wilkinson's article also questioned property rights, and the extent thereof, after death (2002).

Nelkin and Andrews felt that the American Antiquities Preservation Act, mentioned in the previous paragraph, was questionable ethically because it had a harming effect on the culture and religious beliefs of the Native Americans: "*Many Indians assert that disinterment stops the spiritual journey of the dead, causing the affected spirits to wander aimlessly in limbo. These affected spirits can wreak havoc among the living, bringing sickness, emotional distress and even death.*" (1998, p.271). From this example, it is apparent how research on the deceased, even as a collective group and governmentally supported, had significant consequences on the living relatives and tribes. This post mortem harm experienced was a direct result of the cultural insensitivity towards Native Americans.

Let's look a bit closer to our own cultural heritage in Africa. "*In African societies, meticulous care is taken to fulfil the funeral rites, to avoid causing any offense to the departed*" (Setsiba, 2012, p.11). These, often public, funeral rituals are important as many African cultures believe in the continuation of life post mortem (2012, p.17). For many traditional African cultures, before the departed can be acknowledged by the family as being part of the ancestors or living dead, a specific ritual needs to be completed. This ritual, known in Zulu as "ukubivisa" (meaning to reconcile with the dead), is believed to bring the spirit of the deceased home (birth origin) (Setsiba, 2012, p.11). Not only is the specific grave site important, but also not disrupting the grave site. In the past, most people were buried at their homestead where they grew up. Today, primarily due to urbanization, this is no longer the only option (2012, p.28). The growth of townships around major cities and only a few days of family responsibility leave in the job sector have also led to the 'hurrying through' or modifying of some of the time-consuming rituals (2012, pp.33-38). No matter where and in which manner exactly the deceased is buried, it remains a sacred place, and there will be the same strong sense of violation if the remains are altered, as with the Native American population mentioned above.

Interestingly, this importance of burial site is even seen in very old cultures. In the early Hebrew narrative of the Israelites there is frequent mention made of where the person is to be buried. A fascinating section concerns Josef specifically requesting that his remains one day be taken out of Egypt: "*Then Josef took an oath from the children of Israel saying, 'God will surely visit you, and you shall carry up my bones from here'*" (Genesis 50:25). This desire of Josef was kept when Moses fulfilled his obligation to this oath, 430 years after Josef had first come to Egypt (also showing the importance of oaths to the deceased regardless of time). We read: "*And Moses took the bones of Joseph with him, for he had placed the children of Israel under solemn oath...*" (Exodus 13:19). This story ties in closely to the relational obligation of promise keeping I discussed above. On a side note, what is intriguing to me is that after his death in Egypt, Josef was also embalmed and placed in a coffin - as would have been the Egyptian culture at that time; this was especially true of people of importance, and Josef was second in command below Pharaoh. The Jewish nation originated from the Israelites. We still find with today's Orthodox Jews that the principle of intact body is of utmost importance. The matter of body wholeness is discussed in the older, yet still relevant, article about orthodox Jews and autopsies by Rosner (1971), which he republished in 1979 in the Jewish Bioethics journal.

The following are two important quotations from Rosner's article: "*If one leaves unburied any part of the deceased, then one transgresses the positive commandment of burying the dead, and the negative commandments of delaying the burial and defiling the land. There is no rest to the deceased until his entire body returns to the earth.*" (Rosner, 1971, p.49). The second quotation about autopsies states that if an autopsy is conducted it "*must take into account the religious and*

social sensitivities of the population...including the return of all the removed organs to the body for burial." (Rosner, 1971, p.59).

A case that demonstrates this stringent adherence to an intact body occurred in New York, where a judge overruled the post mortem examination seeking to establish the exact mechanism related to the cause of death of an Orthodox Jewish woman killed in a car accident. The judge said: "*An autopsy cannot restore her moral being. It should not be countenanced to destroy her eternal life. The grief which follows the shadow of death must not be compounded by the indignity of transgression against sacred belief.*" (Nelkin and Andrews, 1998, p.287).

Our own large Muslim population in South Africa, and elsewhere, also has very set guidelines around their death rituals. The article "*Preparing the dead body for burial and the Quran's perspective*" (2011), aided my understanding of the haste to bury the body after an autopsy was conducted on a Muslim. It also aided in understanding the customs surrounding the preparation and honouring of the body of the Muslim deceased. One such custom is the expedited burial of the deceased, the same day as the death if possible. This is not written in the Quran specifically, but interpreted in the text referring to the raven that scratched the ground after Cain killed Abel. Quran 5:31 reads, "*Then God sent a raven, who scratched the ground, to show him how to hide the shame of his brother. "Woe is me!" said he; "Was I not even able to be as this raven, and to hide the shame of my brother?" Then he became full of regret.*". The meaning of this shame is interpreted by some as referring to the nakedness of the deceased Abel after the struggle, as the clothing was primitive (leaves and animal skins) and not as advanced as our own in concealing the body well. This leads to the quick burial of the body to conceal the so called 'shame/nakedness' of the deceased corpse to restore dignity. The expedited burial of Moslems is partly due to this desire for a restoration of dignity. Another reason for this quick burial is related to death and the association of death with impurity, as the religion of Islam focuses on spiritual and physical cleanliness. Physical cleanliness is considered an act of worship to Allah. This concept is extended to death and the burial rituals as well, as demonstrated in the ritual '*Ghusl al Mayyah*', which refers to the washing of a body prior to putting it in a shroud (clean linen) for burial. If these religious practices are not respected it can lead to enhancing the grief of relatives and so cause post mortem harm. This is also one of the reasons why a Moslem that died will always have an autopsy as soon as possible to accommodate the religious aspects of the deceased.

We can look at the Navajo Indians in relation to the Hantavirus (Sin Nombre Virus variety) for another important example relating to culture. Most of the Native American tribes believed in a spirit world, where the souls of the deceased went after death. These spirits were also believed to retain ongoing influence in the living world. There is a vast amount of different rituals involved with burial, with many tribes from different regions expressing the mourning ritual in personalised ways. As Stumpff (2010) shows, one specific Navajo tribe believed in a quick burial so as not to provoke the spirit of the departed into causing harm to the living. Culturally, the Navajos did not even speak about the recently deceased as this was highly disrespectful. Due to the young Navajo people who died, to intense and often misguided and prejudiced media coverage, and to Centre for Disease Control (CDC) investigations, the Navajo nation suffered. "*Discussion of death and disease was uncomfortable, and yet the main methods of the CDC investigation were to probe the victims and their families with personal and culturally inappropriate questions.*" (Stumpff, 2010, pp.9-10). This again demonstrates the importance of respecting cultural beliefs and practices concerning the deceased and burial. Since so many died for then-unknown reasons, it was easy for the surviving Navajo to think it may be because of a curse from the spirits of the dead. Now the matter was then compounded by speaking about and investigating it, worsening the suspicions as per belief.

So, we see that in many cases the harm that is perceived post mortem, as discussed above, is in relation to religious beliefs held (Tomasini, 2009, p.448). This is also noted in the cruel punishment during the colonial wars in India. The British executed victims (mostly Indian and Hindu) by placing them over the canon opening. This led to their body parts being dispersed and served as a severe punishment in this life. Also, for their religious reincarnation beliefs, an intact dead body was important to facilitate their next phase to reincarnate (Evans, 2011, p.824). The idea of the body needing to be intact at burial was of utmost importance in the earlier centuries' religions. A link existed between the belief of an intact body, and the transition between this world and the next. An intact body was linked to holiness and salvation. This concept was prominent in the early Christian church and in medieval times (Jones, 2011, p.19; Nelkin and Andrews, 1998, p.262). Up to today many prominent religions uphold the wholeness of the body as essential. These include Moslems, Jehovah's witness, Hindus, and Orthodox Jews, to mention but a few.

It is because of this belief in the sacredness of a whole body that obtaining bodies for dissections in medical schools, especially by early anatomists, has such a tarnished history. Unsavory graverobbing and body snatching attests to this (Jones, 2011; Nelkin and Andrews, 1998, pp.263-264)

2.5 Symmetry

Wilkinson describes the concept of symmetry in his article and states that certain interests remain the same whether one is dead or alive (2002): "*When the interests of the living and the dead are the same, they should be treated symmetrically*" (Wilkinson, 2002, p.35). As I understand symmetry, it is when preferences are similar in life and in death. It excludes interests that need to be experienced (sentience, such as pain) or functioning interests (such as physical activity or health). If, therefore, there is no difference in the significance of an interest whether you are alive or dead, then of course it can be motivated that this interest persists after demise. The idea is that certain interests do not change once we have died; there is a parallel between this life and in death.

An example will serve to make this clearer. If I happen to detest green dresses, then using symmetry it can be presumed that I will still detest green dresses when I have demised. If we used symmetry, everyone that knew me in my ante-mortem person would not dare let me wear a green dress in my casket. This is a simple illustration, but it helps us to understand the parallel dimensions involved. Wilkinson uses an example of property. People would object to someone breaking into their property when they are alive for sake of research, just as people would probably not want their burial property broken into for the sake of research (2002, p.36). We have already seen in some of the discussions by Christison and Hctor that the deceased maintained legal interest in their graves not being violated; this is protected against in South African legislation (2007).

Privacy is another example of symmetry. I have interests in personal information about myself not being made known, such as my sexual preferences. This information about me is private and I would value it remaining private even when I am dead. Private information can have an embarrassing and reputation-tarnishing effect in life and death, which is why it is a strong symmetrical example. It could influence how people closest to you view you while alive or remember you when you are dead.

A further example of symmetry is the giving of consent for research. If I would not have consented while alive to a certain type of research, then it might be presumed that I would also not agree with it when dead. No one would like to be observed while in their bathrooms without their knowledge,

would they? Even with knowledge, it is unlikely permission would be granted. *“If it is reasonable to care about one’s privacy before death regardless of one’s knowledge of whether it is invaded, how can it be simply unreasonable to care about one’s posthumous privacy?”* (Wilkinson, 2007, p37). *“If the interest is weighty enough to ground duties while the subjects are alive it is, by symmetry, weighty enough to ground duties when the subjects are dead.”* (Wilkinson, 2007, p.37)

We are very rigorous in protecting the living’s interests, we should be just as rigorous in protecting the interests of the dead. Wilkinson mentions the amount of scrutiny that many popular and well-known people were exposed to when they died (2002, p.39). The media’s fascination with death, combined with public “heroes” is a disgrace to privacy, to say the least. I will elaborate more on this in chapter 8.

A last example of symmetry could pertain to one’s reputation, not in the sense of privacy, but in relation to your achievements. If I discover a cure for malaria, I would be upset if someone stole that cure from me and presented it as their own. This amounts to intellectual property theft. Symmetrically, I would also not want my academic achievements to be stolen when I die. Even achievements discredited while alive or dead would be just as devastating. I thus have a symmetrical interest in maintaining my life’s achievements and academic property in this life, and in death.

Using this concept of symmetry to apply moral status to the deceased is useful and valid. It is clear from these examples that the deceased does have symmetrical interests post mortem equal to those of a living counterpart. Thus, it is good to include symmetry in the moral status equation of the dead. I will refer again to the concept of symmetry in my discussion of autonomy and the deceased in chapter 9.

2.6 Conclusion:

The deceased is an entity with moral status that deserves moral deliberation. Five concepts discussed the moral significance of the deceased. Three of these were commonly known moral status arguments, namely, human properties, relational argument, and moral agency. The fourth consideration of moral status was based on cultural aspects and religious beliefs. Lastly, the concept of utilising symmetry to attribute moral standing was discussed

I started this chapter by noting the five arguments routinely used to discuss moral status. Of these, two were used to strongly justify moral standing to the deceased. The first concerning human properties was easy to assert to the dead person. In summary, the deceased is not only significant from a DNA and genetic human species perspective, but also because of the individuated nature of humanity. It was pointed out that we speak of dead people and not dead human beings in a more general sense. We also maintain the same features initially of what we looked like while alive, and that is the picture the living relatives maintain in their minds of the deceased as well.

The significance of ante mortem relationships with the deceased was discussed as the second argument to be extrapolated to the dead. Special attention was given to post mortem harm associated with relationships. The Alder Hey affair and the Green Lane Hospital ‘heart library’ are examples of how the unseen emotional bond persisted after death, and therein lies the concept of post mortem harm. The deceased was still very much ‘real’ in the mind and hearts, so to speak, of the bereaved loved ones. This also included promises made to the deceased, where the living felt a need to fulfil these promises, despite the death of the one (or many) to whom the promise had been made. It was argued that the relationship to the dead did not simply terminate with death; rather, there was a continued sense of responsibility as per previous established relationship between the still living and deceased, such as parent to child.

Moral agency was the third contributor to moral status of the deceased. In this section, I argued that the deceased could be seen to have moral agency, albeit in a modified way. The deceased is morally autonomous in decision making considering ante mortem decisions made, which still have consequences of fulfilment post mortem. What I mean is that the deceased “speaks from the grave”; for example, by their living will or prior permission for organ donation.

The fourth important matter that I addressed was the cultural and religious beliefs of the deceased. By both, in a sometimes-interwoven bond difficult to clearly separate, the moral standing of the deceased was accentuated. It was clear to see how these two factors played an important role, throughout the world, in attaching value to the dead. The need to acknowledge cultural and religious practices of the deceased was in fact strengthened and protected by the Bill of Rights as per South Africa’s Constitution³. I used several examples, local and international, to illustrate the moral significance of the deceased.

Symmetry was the last concept suggested as important for attributing moral standing to the deceased. Symmetry presented the deceased’s interests post mortem as parallel to those when he/she was still alive. If an interest you have now, while alive, is still regarded as significant to you when you are deceased, then this is an example of symmetry. It follows then that this interest persists after demise. Indeed, several interests do not change once we die; some of these include interests of property, privacy interests and the interest to have your reputation upheld.

Thus, I have shown through the above five discussion points of human properties, relationship considerations, moral agency, symmetry, and cultural and religious considerations, that the deceased can indeed be regarded as having moral standing. This entails, therefore, an obligation towards the deceased. One of these obligations is to uphold ethical interests as related to the deceased, also in the field of forensics.

“What has become obvious is that respecting the deceased’s body is not just about dying and death, but the experience of the living, the identity of the deceased and the strength of social relationships.” (Haddow, 2005, p.110)

I suggest that all five of these aspects are useful and important in attaching moral status to the deceased. The question then is not whether the deceased has moral status, but the scope of obligation to which such a moral status gives rise. In the following chapters, I will explore the scope of the deceased’s moral status in relation to the forensic medicine context. In the next chapter, I will firstly explore some of the ethical issues of the forensic medicine sphere, as through the eyes of a forensic doctor, by looking at selected literature. Thereafter, prior to exploring these identified issues in more detail, I will discuss the options for a framework that can be used for this purpose.

³ The right to freedom of religion, belief and opinion is enshrined in chapter 2 of the Constitution of South Africa that contains the Bill of Rights. Unfair discrimination, including for religious practices, is prohibited in section 9 and section 15 allows religious practices that are not in contradiction to other laws.

Chapter 3: Exploration of ethical issues in forensic medicine

3.1 Introduction

In the previous chapter, I argued for moral status of the deceased on philosophical grounds. That chapter showed why the dead mattered, validating the exploration of ethical matters in forensic medicine. The moral standing deliberation was based on five concepts. First, by utilising the argument for human properties of the deceased; secondly, the argument for relational considerations with emphasis on post mortem harm, and thirdly, the argument for moral agency. The fourth point was cultural and religious considerations, and lastly the application of the concept of symmetry.

In the introductory chapter I summarised the two-fold aim of this thesis. The two questions that comprise these aims were, first, *do ethical issues exist in the field of forensic medicine in the South African context, and what are some of these issues?* The second, *if there are ethical issues, how can they best be identified and explored?* In this third chapter, I will explore the first of these questions. I will show that ethical issues do exist in forensic medicine by highlighting several examples, including from the South African context. The second question will be delved into in the following chapter, where I search for a framework which can best be utilised in the forensic context. In the rest of the thesis I then explore some of ethical issues in forensic medicine by means of the chosen framework.

The available literature dealing specifically with ethics in forensic medicine is very limited both nationally and internationally, although it needs to be noted that my search was limited to literature written in the English language. I have divided this chapter into two main discussion topics. Firstly, I mention the background and some literature regarding forensic medicine in an historical overview. The second main discussion topic is related to identifying some of the ethical issues in forensic medicine by means of the available literature. Both areas of discussion directly relate to the first question of my thesis, namely the prevalence of ethical issues in forensic medicine.

3.2 Historical background

I have been an avid reader my whole life. My specific passion is autobiographies and biographies. We can learn a great deal from people's lives. History becomes alive when we see it through the eyes of others that experienced historical events. I will mention two recently read biographies that have influenced me to explore the concept of ethics and extrapolate the ethical issues specific to forensics. Thereafter, I will discuss the Alder Hey affair and the Green Lane Hospital 'heart library' cases, as these have also affected the way harm is perceived as related to the deceased and their organs.

3.2.1 Steve Biko

The first important book was *Biko: the biography*, by Dr Xolela Mangcu (2012). I have extensively referred to the historic case of Biko in the previous chapters. The significance of this historic case to my thesis lies with the fact that Biko and the events of his life and death took place within South Africa. His life, and especially his death, was documented in such a way by Mangcu that it gives a voice to the deceased Biko. Steve Biko, in a sense, is "speaking from the grave" to the reader. His tragic and premature, unnatural death under the state authorities of the apartheid regime in South Africa – as related to his interrogation (including physical force) and lack of appropriate medical care – captures the possible outcome of unethical statutes. Forensic medicine is bound up in the regulations of the governing authorities. This field of medicine is more intimately related and accountable to judicial structures than any other field of medicine. What the death of Biko

personifies is unethical law. His story shows that legal structures, and the state authorities governed by them, do not automatically produce fairness and can be morally flawed. The following statement sadly illustrates the moral apathy that prevailed when the Minister of Justice and the Police at the time, Mr J.T. Kruger, addressed the National Party Congress, who responded inappropriately with laughter after his remark: *“I am not saddened by Biko’s death and I am not mad. His death leaves me cold.”* Kruger’s remark reverberated around the world.” (Mangu, 2012, p.262).

Some of the previous apartheid laws, under which South African was governed from 1948 to 1991, may have been morally acceptable for a minority, but were not morally acceptable to the majority, including many white people. For me the case of Steve Biko illustrates why all laws should be reflected on from both an ethical and moral applicability viewpoint. In the evaluation of any law for moral applicability, it would be good to take cognisance of the so called common morality. Beauchamp and Childress refer to a *“common morality”* and explain that morality refers to norms about right and wrong human behaviour that are accepted by most stable societies (2013, pp.2-3).

The second reason the biography of Biko is important is related to the dual loyalty dilemma. As was outlined in the first chapter, the doctors involved with Biko all succumbed to the pressure from the prevailing governing authorities. Biko was arrested and interrogated under police custody in Port Elizabeth. He was basically tortured and sustained multiple injuries, including a significant injury to his head, which was only referred for medical attention a day later. The first dual conflict situation arose when Biko was in the holding cell and the attending district surgeons saw him. The authorities did not want his torture to be exposed publicly as he was a black political activist and leader of the Black Consciousness Movement. The doctors subsequently neglected to refer him immediately to a nearby hospital. A medically inappropriate decision was made by the presiding police to transfer Biko to Pretoria, which was not challenged by the doctors. After his demise, the forensic pathologist that conducted the medico-legal examination also neglected to indicate the appropriate contributory factors to Biko’s death. The conflict of interest for the doctor conducting the autopsy was that the authority he was working under was influenced by the police as well. Obviously, the police were directly responsible for his death. Given the interest the public may have in this known activist, the police would not want the autopsy report to fully expose any torture and medical negligence. The report stated the main cause of death but failed to mention the link to torture and contributory factors of negligence on the part of the district surgeons. Further investigation into Steve Biko’s death only occurred eight years later and was due to international pressure on South Africa rather than widespread national concern!

3.2.2 Henrietta Lacks

The second book of historical significance was the intriguing account of the life of Henrietta Lacks and her immortal HeLa cell line, *The immortal life of Henrietta Lacks* (Skloot, 2010). Multiple ethical issues were mentioned throughout this book and cannot all be explored in detail. One aspect that is particularly important to my thesis, which I already alluded to in the previous chapter, is post mortem harm. The concept of post mortem harm cannot be overstated when it comes to forensics as it is so intricately linked to the deceased and the surviving family. All the other ethical concerns Skloot confronts in her book in some way link back to post mortem harm (2010). For example, another important issue is that of retained cervical tissue – done without Henrietta’s or the family’s informed consent, under a prevailing paternalistic system of that time. This is of course comparable to the removal of tissue in forensics, protected by the legal system and thus negating consent too. Then there is the right of privacy and the deceased. The right of access to information to the family and the public is also explored, considering Henrietta. Skloot also touches on the commercialisation of profitable scientific research discovery, which of course opens a whole other

avenue of ethical discussion. There is also the issue of the compensation of surviving family as related to scientific discoveries arising from the use of retained tissue (a discussion which revolves around property rights). There are numerous other ethical considerations related to the case of Henrietta Lacks, but, unfortunately, full exploration of all these issues is beyond the scope of this thesis. I will, however, briefly explore the legal aspects related to avoiding obtaining consent and tissue retention in forthcoming chapters.

In a similar way to the Biko biography, Skloot's account allows Henrietta Lacks to speak from the grave, as it were. This biography is a journey of a science journalist, Rebecca Skloot, who relentlessly pursued and investigated the story behind the immortal HeLa cell line. This is intricately woven into the brief life of Henrietta and her surviving family in the wake of this scientific breakthrough. Skloot writes about the journey of cell cultures from infancy to what we use routinely today in laboratories around the world. She also explores the ethical issues related to research on human tissue. What I appreciate about this book is that it is not merely a factual rendition of events in recent scientific history, but it weaves the personal story of Henrietta Lacks, her family and other role players into the scientific facts. This linkage of science with real people highlights the pertinent ethical dilemmas, such as the concept of post mortem harm, so crucial to this thesis.

In summary, Henrietta died of metastatic cervical cancer at a young age, after receiving routine medical care as any "coloured" patient would have received at that time in 1950s America. Cancerous cells were also routinely biopsied, as was the practice at that time at The Johns Hopkins Hospital where she received treatment. The start of the ethical debate is linked to the routine harvesting of cervical cells from Henrietta for research purposes. The problem? No consent was obtained for this routine harvesting for research, and the only consent signed was for the operation itself. What makes her cells different from those extracted from other patients, is that hers were successfully kept alive. Her cell line became 'immortal' and is now known as HeLa cells. If Henrietta would be alive her DNA would match the DNA of the HeLa cells. This "immortal cell line" is still used scientifically today. One of the first major scientific breakthroughs directly linked to HeLa cells was the development of the polio vaccine.

"It's not only the story of HeLa cells and Henrietta Lacks, but of Henrietta's family – particularly Deborah [Henrietta's daughter] – and their lifelong struggle to make peace with the existence of those cells, and the science that made them possible." (Skloot, 2010, p.7).

The concept of post mortem harm was covered in-depth in the previous chapter. In the story of the HeLa cells we see how a tissue sample taken without the patient's explicit consent, and without the family's involvement, has led to post mortem harm. The Lacks' family were unaware of the scientific breakthrough related to Henrietta's cells for many years. When they found out, they were completely confused and did not understand what was going on. They felt the medical system had "stolen" something precious from them, and the fact that they were kept in the dark for years worsened the experienced harm. This following emotive quote, from another family member, is a powerful portrayal of their experienced post mortem harm: *"Everybody always saying Henrietta donated those cells. She didn't donate nothing. They took them and didn't ask.' She inhaled a deep breath to calm herself. 'What really would upset Henrietta is the fact that Dr. Gey never told the family anything – we didn't know nothing about those cells and he didn't care. That just rubbed us the wrong way...why didn't they say anything to the family? They knew how to contact us! If Dr. Gey wasn't dead, I think I would have killed him myself'" (Skloot, 2010, p.169).*

Skloot records another concern held by Henrietta's daughter, Deborah, which shows that a family's perception of harm: *"She was terrified and couldn't stop wondering if the parts of her mother they were using in research could actually feel the things scientists were doing to them." (Skloot, 2010,*

p.188). Haddow also noted this continued relationship, in an unseen bond, while interviewing donor families after organ donation of a deceased family member had occurred, as mentioned in the previous chapter (2005). He noted that there was a continued relationship between the surviving relatives and the deceased, and that death did “*not mean the termination of the relationship with the previous embodied self*” (Haddow, 2005, p.109).

In Henrietta’s case, the family experienced post mortem harm, even with only smaller tissue samples taken. It does not need to be larger, emotive organs only. This is important to be aware of in forensic medicine as in many cases of sudden, unexpected death, routine tissue samples are collected for histological analysis to assist with the cause of death determination. As mentioned, I will explore the retention of samples in forensics later in the thesis in more detail.

3.2.3 Alder Hey-affair and Green Lane Hospital

Two other important historical events that are important to mention here relate to the Alder Hey-affair and the Green Lane Hospital’s ‘heart library’. Numerous authors have written about the ethical dimensions of these landmark cases, including the following: Arcus and Kessel (2002), Burton and Wells (2001), Evans (2001), Jones (2011), Skegg (2003), Tomasini (2009), and Wilkinson (2002). These two cases closely link to my discussion in relation to post mortem harm. As explained in chapter 2, the concept of post mortem harm is connected to the harm that the living relatives experience as directly related to what happens post mortem to the deceased’s body. The relational and emotional bond that existed ante mortem still exists post mortem. This continued, unseen relational bond is what makes the ethical discussion important.

These two cases occurred at different timepoints and different countries, but both had similar ethical repercussions. The Alder Hey-affair occurred in England at the Alder Hey Children’s Hospital and Bristol Royal Infirmary but is commonly known as the Alder Hey affair/organ scandal. It involved the post mortem retention of children’s organs, without parental cognisance and consent to the removal of these organs. Even though the retention was not in itself malicious, and the purpose for which they were retained was ongoing research and educational purposes, this does not absolve the actions of the institutions. The institutions were functioning under the Human Tissue Act of England that did not require consent for such actions. Parents were not informed that they could object to the retention.

The ethical concerns related to the Green Lane Hospital’s ‘heart library’ revolved around similar issues as the Alder Hey Affair Green Lane Hospital, in Auckland, New Zealand, retained the hearts of more than 1300 children in the 1950s and 1960s (Jones, 2011, p.20). These were hearts from infants and children with congenital defects. Aborted foetuses were also kept. The reason behind the ‘library’ was further research and teaching purposes. It resulted in significant advances in cardiac surgery, but most parents were unaware of the retained hearts. The retention was done in accordance with the Human Tissue Act of New Zealand at the time, like England, and did not require parental consent. “*Since detailed pathological examination of organs required to establish the cause of death could require a delay of up to 6 weeks, it was not considered appropriate to return the organs to the family this long after the child’s funeral*” (Jones, 2011, p.20). This last quotation has implications for our South African context, where many hearts and brains are currently retained as they may be required for medico-legal examination. This retention is also protected by statutes regulating autopsies. The families are not always informed of the retention, and the organs are not often returned as the requests are rare. The heart and the brain are emotive organs and connected to greater perceived post mortem harm, as discussed in the

previous chapter (Burton and Wells, 2001, p.820; Evans, 2001, p.825; Haddow, 2005, p.109; Jones, 2011, p.20; Jones, Gear and Galvin, 2003, p.346; Skegg, 2003, pp.425-426).

Post mortem harm stretches beyond retained tissues, as with Henrietta's cancer cells, or retained organs, such as Alder Hey and Green Lane Hospital. Post mortem harm can be anything that involves disrespecting the bodily integrity and/or dignity of the deceased. Jones and McCullough illustrate this point when they evaluate the teaching practices of medical students as related to practicing procedures, such as endo-tracheal intubations, on recently deceased corpses (2011). The authors noted the harm that can be caused to the living relatives when they found out this was done, as it violated the integrity of the body and was undertaken without the explicit and specific consent of family (Jones and McCullough, 2011, p.880).

In the above historical overview, I succinctly mentioned important events that helped to underscore the significance of addressing issues in forensic medicine. I will now explore some of the current ethical issues in medicine.

3.3 Ethical issues in forensic medicine

As this thesis unfolds, it will become apparent how complex the field of forensic medicine is, especially within the South African context. The array of reasons for this includes the deceased as a 'role-player', together with multiple others, as well as integrated legislation. The Australian authors Plueckhahn and Cordner's book, *Ethics, Legal Medicine and Forensic Pathology* (1991), discusses the interface between medicine, law, and ethics, and how these fields intertwine. The authors emphasised that in the absence of a defined "common morality" and allowing individuals to arrive at conclusions by personal choice leads to disparity within medicine disciplines, laws and the public in general (Plueckhahn and Cordner, 1991, p.16).

Most literature I have read about ethical concerns in the sphere of forensic medicine can be roughly sorted into two main categories. First, there are issues related to the conflicts of interest, which can be experienced by important role players and stakeholders, as mentioned above. Dual loyalty concerns are ethical issues that place the acting agent, in this case the forensic pathologist, in a conflicting role as moral agent between two (or more) role players who may have very different interests.

The second category of concerns revolve around retained interests of the deceased post mortem. The conclusion of the thesis' second chapter was that the deceased can be regarded as having moral significance with moral standing. This translates into certain interests that remain relevant after death. These maintained interests can be seen, from a moral point of view, as obligations to be met. As the field of bioethics is concerned with the deliberation of moral decisions in health care, this would mean that if interests pertaining to the deceased are disregarded or violated, these actions, or lack of actions, are ethically challengeable. This brief discussion will illustrate that there are indeed ethical issues in forensics, and that this is a field in medicine where more ethical deliberation is required in a more structured manner.

3.3.1 Dual loyalty concerns

Dual loyalty and the judicial system:

Forensic medicine, as noted already, is linked to the judicial system. Current South African legislation related to forensic medicine needs to be considered for ethical appropriateness. The earlier historical cases, noted above and in the introductory chapter, demonstrated how laws are

not automatically equated with ethical integrity. This concept will be further explored in chapter 5. Questionable legislation is still apparent in some countries, such as North Korea (Lee, 2015), and in Afghanistan, where females are legally still regarded as inferior to their male counterparts in terms of clothing, education, and vocational opportunities (Moghadam, 2004). In South Africa the foundation of our legal system is the Constitution of the Republic of South Africa (Act 108 of 1996), with specific reference to the Bill of Rights (The Constitution, ch.2, pp.5-20). The below mentioned statutes will be discussed in chapter 5 regarding their ethical applicability:

- *Occupational Diseases in Mines and Works Act 78 of 1973*
- *The Births, Marriages and Deaths Registration Act 51 of 1992*
- *National Health Act (NHA) 61 of 2003*
- *Health Professions Amendment Act 29 of 2007*
- *Criminal Law (Forensic Procedures) Amendment Act 37 of 2013*
- *The Inquests Act 58 of 1959*
- *Independent Police Investigative Directorate (IPID) Act 1 of 2011*

These statutes are important from a dual loyalty perspective. Firstly, they govern the forensic pathologist and direct the general performance of medico-legal autopsies, as well as dictating to a certain extent the doctor's first 'loyalty', namely towards the state. The second 'loyalty', as such, is with the deceased and the surviving family.

The National Code of Guidelines for Forensic Pathology Practice in South Africa (2007) was another local source I used throughout the thesis. In this booklet, brief mention is made under the Mission of FPS, that the FPS aims to "*promote the highest practice of professional and ethical conduct*" (paragraph 5, p.5). The booklet is very detailed in all the general guidelines relating to the FPS and medico-legal investigations. It encompasses everything from standards and procedures to facility management guidelines. Although this will ensure that the speciality field will function according to set guidelines, these guidelines are service-orientated and not explicitly morally-sanctioned. In other words, as in all fields of medicine, the general service delivery component does not imply that all services rendered will necessarily be ethical.

The booklet does briefly touch on a few ethical issues, including the conflict of interest that arises for the forensic doctor in the service of the state's FPS. Two sections that specifically address dual loyalty are as follows: "*Presence of persons other than the authorised person performing the examination at a medico-legal post mortem examination*" (paragraph 43, p.12) and "*Medico-legal post mortem examinations by a medical practitioner on his/her own patient*" (paragraph 44, p.12). The guidelines of the booklet in this regard are very brief and do not extensively explain the moral justification for each guideline. It does not mention dual loyalty *per se*, but the prohibition, for example, of performing an autopsy on your own patient is obviously to enhance objectivity.

The example of Steve Biko clearly shows this conflict of interest. The state/ police surgeon doctors were coerced by their state loyalty and neglected their other loyalty towards Biko in initially under-treating, and the later 'watering down' of the autopsy report; as mentioned, the official autopsy report only stated that he died due to "*application of force to the head*" (Mangu, 2012, p.263). This is not the only important example found in my literature search. Many articles deal with the possibility of coercion existing in the forensic sphere. The possibility of intimidation to arrive at a conclusion on behalf of one or the other party always exists in the forensic environment. This was well discussed in the article by Kelly, Moon, Savage and Bradshaw, entitled "*Ethics and the police surgeon: compromise or conflict?*" (1996). As the title of their article suggests, the dual loyalty dilemma in forensics can be summarized as conflict and/or compromise between the interests of justice and medicine (Kelly *et al.*, 1996, p.1569). The balancing between criminal justice

requirements in forensic medicine, and between the suspect and the deceased, is not always easy. Kelly *et al.* state that it is important “to define clearly the parameters of the public interest in the detection of crimes in relation to the rights of individuals who may be suspected of criminal activity” (1996, p.1574). This may amount to a detailed autopsy which may be revealing of confidential matters that the deceased or living suspect may have wanted concealed, including narcotic or alcohol presence, HIV status or even a pregnancy. This dilemma between confidentiality concerns and the medico-legal requirements may be in direct opposition, placing the forensic pathologist in a difficult situation of conflict. These are some of the matters that I will delve into in more detail in the forthcoming chapters.

In the introduction of the thesis I also mentioned Dr Wendy Orr, who had to fight against intimidation by her superiors to hide the atrocities of the abuses some of the prisoners in custody were encountering under the past apartheid regime (Moodley, 2011, pp.100-101), which can often be the case in prison health care. This was clearly noted in the following two articles, *Dual Loyalty in Prison Health Care*, by Pont, Stöver and Wolff (2012), and *Forensic Medicine in the Next Century: Some ethical Challenges*, by Taborda and Arboleda-Flórez (1999). Both articles highlight the conflicting interests of the health care provider, specifically as present within prisons. This is important from a forensic pathology point of view as some of these prisoners may die, becoming a death in custody case, and require an autopsy. In these cases, it is important to be aware that the cause of death may be linked to the custodial authority by an act of omission or commission. An omission may involve poor oversight or a lack of sufficient and appropriate health care and nutrition. An act of commission may be related to physical assault; for example, to get a confession. Both were present in the Biko case. The temptation in custodial deaths to mask sustained injuries due to the dual loyalties faced is real. Thus, heightened suspicion in this context is always important. In South Africa, we are privileged to have a separate investigative arm overseeing custody deaths, namely the IPID, which functions under the auspices of the IPID Act, in effect since 2012 (which I will discuss further in chapter 5). This act specifically aims to independently investigate matters where the police are involved, such as death in custody cases or when a police officer shoots a civilian. The attempt by the state to involve a third, hopefully objective, party can lessen the coercion that may ensue where there is a conflict of interest.

It is worth mentioning that another area of conflicting interest relates to inter-professional loyalty. What I mean by this phrase is a type of camaraderie that exists between medical professionals who function under the same healthcare umbrella. When a patient dies on the operating table or during the administration of anaesthesia, as an example, this case may need the attention of the forensic pathologist. There may be pressure on the forensic doctor, as a colleague, to cover up a mistake or distort the post mortem report. The conflicting pressure to ignore negligence is very real. I will explore this arena of dual loyalty in forthcoming chapters. Let's return to the prison.

In the field of forensics, torture, especially in custody situations, must always be considered as an option. If one fails to regard it as an option or explanation of injuries identified, one may fail to identify the cause. Thomsen's article, *The role of the pathologist in human rights abuses* (2000), also emphasises recognising subtle signs of torture, which is why the training of forensic pathologists also becomes important. The pathologist must be able to recognise and correctly interpret injuries detected at autopsy. The inability to correctly interpret injuries would be concerning, for obvious reasons.

Over interpreting injuries is also not justifiable. This may lead to over prosecution. This was clearly emphasised in the article related to investigation of war crimes mass graves, *The International criminal tribunal for the former Yugoslavia (ICTY) and the forensic pathologist: ethical*

considerations (De La Grandmaison, Durigon, Moutel and Hervè, 2006). In this article, the authors mentioned the importance of not being coerced by the party that sanctioned and compensated the pathologist's services. This financial dependence can influence impartiality, especially if it is a Human Rights organisation (De La Grandmaison *et al.*, 2006, p.210). The importance of the objectivity of the forensic doctor in any dual loyalty situation is paramount.

The tension of dual loyalty situations is well depicted in the following quotation; even though it specifically relates to the investigation of mass graves, it is generally applicable to the forensic pathology: "*Forensic pathologists who adopt a responsibility ethics need to conduct themselves in ways that do not infringe neutrality and independence and therefore impartiality. They must be aware of the limits of the medico-legal investigations and that the lack of knowledge of particular war situations can lead to wrong or improper interpretations. The responsibility ethics requires from him a critical point of view about his mission and about aims of the international criminal justice. Having such critical mind requires real facts such as experience of being subjected to pressures or knowledge of non-investigated mass graves, which can challenge the supposed impartiality of the ICTY. They need to acknowledge and understand the serious pitfalls associated with involvement in this type of mission: the forensic pathologist is exposed to participate wittingly, unwittingly or by virtue of poor practice in violations of human rights. They may also be exposed to manipulation.*" (De La Grandmaison, 2006, p.210).

Dual loyalty and the expert witness:

Another important ethical issue pertaining to dual loyalty is with the forensic pathologist as an expert witness in court. Of all the fields in medicine, this is the one domain where you will be regularly required to testify in court. The dual loyalty between the deceased's case and the "party", prosecutor or defence on whose behalf one is acting as an expert witness, is important to consider here. The significance of *assisting* the court in understanding complex matters, in order for the court to arrive at an informed judgement, was emphasised over and over in many articles including: *The case of Sally Clark*, by Bacon (2003); *Justice for the Innocents*, by Coglán (2005); *Pathologist faces GMC hearing over altered autopsy report*, by Dyer (2005); *The Goudge Inquiry and the role of medical expert witnesses*, by Iacobucci and Hamilton (2010); and *Ethics and Deontology in Forensic Medicine*, by Matejić and Otasević (2010).

In Canada, the Goudge inquiry shed much light on the special role the forensic pathologist has as an expert witness. Due to the adversarial system (same as in South Africa) requiring that each party's case is fairly given to the court, much credence is given to the testimony of the expert witness. This is even more so today than ever before due to the increased specialisation seen in the field of medicine. This specialisation requires expertise in the various fields to explain terms and concepts laymen and judicial structures are not familiar with. Experts are required to explain their domains in such a way that the judge is assisted in knowledge and will more accurately be able to arrive at the truth. Forensic doctors should be aware that they should be impartial and state facts. If opinions are offered this should be clarified and stated as such. The same sentiments were reiterated by Matejić and Otasević (2010) as they stressed the assistive role of forensic specialists to the judicial system.

In the closing session of an International Association of Forensic Sciences (IAFS) meeting, a panel of experts were consulted to contribute their view about various ethical dilemmas faced by the forensic sciences (1991). One of the topics most discussed was the role of the expert witness and 'expert shopping' - referring to the practice whereby lawyers contact any number of experts in a

certain field until one is found whose opinion most suits the lawyer's chosen argument. This "expert shopping" was already prevalent in the 1990s; how much more relevant today, with increased medical advances, unheard of more than thirty years ago. Major advances in the terrain of forensic sciences, such as DNA typing and Nano-medicine, is but one example of the rapid development influencing forensic pathologists as well (Giardina, Spinella and Novelli, 2011; Walsh, 2004). The advancement and "*interpretative complexity*" with the criminal justice element "*brings significant responsibility and a heavy onus to ensure absolute scientific and ethical integrity*" (Walsh, 2004, p.58).

In South Africa we have had our share of highly publicised court cases where the complexity of expert witness' inconsistencies in their testimonies have shown how dual loyalty is an important factor to discuss. One such a court case was the State vs. Van der Vyver. It was about the Inge Lotz murder investigation. In his "*Fruit of a poisoned tree: A true story of murder and the miscarriage of justice*" (2010), Altbeker demonstrates effectively how vital the expert witness' testimony can become, especially when related to the detail of homicide cases. This tragic, unsolved murder of Inge Lotz demonstrated how important expert witness testimony was. Fred van der Vyver, the main suspect, was pronounced not guilty. His defence's expert witnesses swayed the case to his innocence, although the actual verdict does not form part of my current discussion. What is important to emphasize is that expert witnesses can sway the case in favour of or against the suspect or victim.

Another example of an expert witness debacle was the televised Oscar Pistorius trial, which was completely exacerbated by the media presence. A thought-provoking article by Bester, "*Oscar Pistorius: The injustice of open justice*" (2016), examined the dichotomy of our current 'open justice' judicial system. In open justice the media's involvement can influence the trial at hand, depending on the person on trial of course and the public's interest in the outcome of the trial. Bester also stated that most people called to testify are already under pressure; how much more so when this is a high-profile case being televised world-wide (2016). This extensive media coverage may influence the impartiality of the witnesses, as it was almost impossible not to be aware of what was going on in the trial and who had already said what by the time an expert witness was called to the stand. I will address this important ethical issue in chapter 8. Whether we agree or disagree with the methods employed, we have an adversarial system and the expert witness will remain important role players. Therefore, it is essential to discuss this ethical dilemma in more detail, as well as highlighting the integrity of the forensic doctor.

3.2.2 Retained post mortem interests

Upheld bodily integrity:

In the previous chapter I briefly mentioned that certain ante mortem interests can remain after death. This was discussed in relation to symmetry and a modified argument in support of moral agency. These included examples of interests that persist, such as those related to your property or body. I propose that a vital interest that is retained post mortem is that of bodily integrity. The body is treated with respect, and any prior ante mortem wishes relating to the body, such as organ donation or a decision to be cremated, should be upheld. This also means that the bodies of the deceased should not be mutilated, even in cases where a post mortem is required. Even knowing ante mortem that there might be a chance that your bodily integrity will be violated could already cause harm, as alluded to in the symmetry section in chapter 2. Examples of religious interests in bodily integrity include intact body burial for orthodox Jews or rapid burial for Muslims. In the chapters to follow I will discuss such examples again. In the correspondence between Benbow and

Baron, Professor Baron said the following: “*Most societies believe that a body commands respect, at least as a reminder of the person that it once was.*” (Benbow, 1993, p.973). This ethical duty to uphold bodily integrity is important and implies that harm can ensue if it is not respected, even after death. The need to involve the families, especially if the hands and face (associated with the living persona of the deceased) or any large organ need to be investigated, was also emphasised. Even in forensic autopsies, not legally requiring permission for the autopsy and removal of organs if so required, it would be decent to at least inform the families thereof. This will be mentioned in more detail in chapters to come.

Post mortem identification:

Christison and Hctor confirmed the importance of retained interests post mortem in their article, *Criminalisation of the violation of a grave and the violation of a dead body* (2007). They examined the legal terrain of violation of the deceased’s grave and body, from historic times to current South African legislature. I utilised this article in the thesis as it gave merit for the significance of the corpse from a retained interest in bodily integrity, with special reference to dignity, as well as interest in the post mortem property of the deceased, such as the grave site. If violations to the grave or body are regarded as crimes and prosecuted, this attributes significance to the retained interests that the deceased then has.

As a forensic pathologist the importance of identification is also paramount. The National Code of guidelines for Forensic Pathology Practice in South Africa, in accordance with the Inquests Act and the NHA, stipulates the facilitation of “*accurate identification of the body, utilizing special procedures where necessary.*” (2017, p.13) Apart from the legal significance required for the identification of the deceased, it was also important for the families of the deceased. From finalisation of estate matters to grieving and mourning rituals that required attention, everything was related to the deceased as a specific person linked to their living relatives. The heart of identification was well summarised as the relatives needing closure and the opportunity to mourn the death of a loved one in the article by Nuzzolese, *Missing people, migrants, identification and human rights* (2012). Nuzzolese expanded upon the missing person crisis globally, especially with the amount of migration occurring across borders of countries (2012). This mass migration crisis, due to multiple factors, directly increases the proportion of missing people internationally, which in turn leads to an increase in unidentified bodies. If the identification of the deceased is not prioritised internationally by minimum uniform methods, this leads to relatives unable to know whether their missing loved one has in fact died or not. This quotation by Nuzzolese captures the intensity associated with this uncertainty: “*A missing person may be either alive or dead, but for the families the uncertainty will continue until the body is recovered.*” (2012, p.52). This quotation also touches on the post mortem harm concept. This of course all relates to identification that is retained as a post mortem interest. In chapter 6 I specifically address the right of the deceased to be identified. The dissertation by Evert, *Unidentified Bodies in Forensic Pathology Practice in South Africa. Demographic and medico-legal perspective* (2011) aided in this important issue. It was also relevant that both South African authors, Nuzzolese (2012) and Evert (2011), emphasise the universal principles of human rights and human dignity. In the previous section I alluded to the dual loyalty ethical consideration in forensics. This was well discussed about mass graves related to war crimes investigation. De La Grandmaison *et al.* (2012) discuss the importance of identification in these mass grave settings. The emphasis on good, universally accepted autopsy protocols related to identification was again applicable.

As identification is paramount, this directly links to DNA collection. DNA has probably become one of the most important scientific advancements in this past century, and the increase in genome analysis and continued refinement aids identification tremendously. Of course, there are other notable methods of identification as well, and these will be discussed in chapter 6, but since DNA is the 'poster child' of identification, I feel it needs emphasis here. DNA not only aids identification, but it does bring with it some concerns as well. The ethical issues related to advanced technology undeniably increase the responsibility which rests on forensic scientists. Although forensic science is not forensic medicine, the importance of this topic cannot be over emphasised because forensic pathologists are the primary collectors of DNA samples, in terms of identification. The forensic pathologist is dependent on the forensic science laboratory to render a service in conjunction with them. Both forensic services collaborate to assist the judicial system of the country. Both services are dependent upon each other to function optimally and assist the court. Walsh summarised the accountability of accurate interpretation in this complex field, that is so intricately linked to the judicial process and has the power to convict or pronounce innocent based on the DNA analysis and testimony of the forensic scientist (2004, p.58).

Post mortem confidentiality and privacy concerns:

The complexity associated with DNA interpretation is not the only ethical concern. The possibility of ethical concerns related to DNA databases and international collaboration through such databases must be realised as well. These can aid tremendously in identifying many unidentified bodies, such as with the migration crisis described by Nuzzolese (2012) or mass graves (De La Grandmaison, 2012). Advantages of identification by DNA methods aid the grieving family and can lead to linkage to criminal matters, resulting in justice prevailing. The disadvantage and ethical concerns are especially related to a person's right to privacy and confidentiality, as DNA is a unique identifier related to the deceased and to the genetically linked relatives (Knoppers *et al.*, 2006; McQuire *et al.*, 2010; Meintjes-van der Walt, 2011; Taborda and Arboleda-Flòrez, 1999; Van Camp and Dierckx, 2007; Walsh, 2005). A major concern of these DNA databanks may relate to the governance thereof. If the central governance of such a databank is questionable, it can nullify the benefits of such a bank. A possible concern may include fraudulent activity if a person who has secure access to the protected samples, purposely swabs samples. This action then links the wrong DNA of someone to another person. It may even cause an innocent person to be erroneously linked to criminal activity. Meintjes-van der Walt well discussed these ethical concerns, *A South African intelligence DNA database: panacea or panopticon?* (2011), and Van Camp and Dierckx, *The expansion of forensic DNA databases and police sampling powers in the post-9/11 era: ethical considerations on genetic privacy* (2007). If both the data bank and the judicial service are governed under the same authority, namely the state, this again may result in a possible dual loyalty situation. It may also give rise to possible coercion and can also result in similar fraudulent activity as mentioned above.

The article by Giardina *et al.* explores DNA-typing in Nano-medicine: "*Forensic genetics is the branch of genetics that uses DNA analysis and comparison to resolve legal problems, such as paternity tests and inheritance matters, establish identity in criminal cases where the biological evidence is found at crime scenes and identify victims of mass disasters and missing persons from human remains.*" (2011, p.257). To counter the above mentioned ethical considerations of DNA, Giardina *et al.* succinctly state that "*independent and accountable governance*" is key and in accordance with Human Rights (2011, p.269). Authors Middleton, Baxter, Demo, Honeywell, Jentzen, Miller, Pinckard, Reichard, Rutberg, Stacy, and MacLeod contributed towards a position paper on genetics in the forensic medicine field which was also foundational for this topic, namely,

National Association of Medical Examiners Position Paper: Retaining Post Mortem Samples for Genetic Testing (2013). Walsh echoed this article's view by regarding the ethical concerns of forensic DNA profiling (2005). Middleton *et al.* explore the legal perspectives as well as the issues of privacy, civil liberty, and social justice (2013). The limitation of this scientific field was well addressed, as well as the fact that each case is different, and the interpretation of the evidence will always just be that, *interpretation*. It is important for forensic scientists to be unbiased and objective, and all evidence considered on a case by case basis.

I briefly mentioned the importance of the maintained interest the deceased has for identification. In the above discussion the next important interest that persists post mortem was touched on, namely that of continued confidentiality and privacy after demise. The National Code of Guidelines for Forensic Pathology Practice in South Africa (2007) also addresses this important consideration, in the section entitled; "*Confidentiality of medico-legal post mortem findings and reports*" (paragraphs 46-54, pp.12,13).

Many international codes address confidentiality concerns, such as the Declaration of Geneva of the World Medical Association (WMA), which states: "*I will respect the secrets that are confided in me, even after the patient has died*" (2006). The Health Professions Council of South Africa's (HPCSA) guidelines state that confidentiality remains even after death: "*Health care practitioners still have an obligation to keep personal information confidential after a patient dies. The extent to which confidential information may be disclosed after a patient's death will depend upon the circumstances*" (HPCSA booklet 10, 2008, p.10). The circumstances under which disclosure of information may occur will also be dealt with in the thesis.

Confidential medical information may be important after death for various reasons. A balancing act needs to take place between the patients' right to confidentiality, even in death, on the one hand, and the state's right to access of the information on the other; for example, the cause of death being made known to researchers investigating public health concerns (Matthews and Martinho, 2012). Matthews and Martinho (2012), as well as James and Leadbeatter (1996), address some of the important issues pertaining to confidentiality and the deceased. This becomes even more important in unnatural deaths and criminal cases. James and Leadbeatter state that "*the death of the patient does not absolve the doctor from the duty of confidentiality*" (1996, p.2). They also discussed another dual loyalty dilemma. There is a duty to uphold confidentiality of the deceased, which can conflict with the loyalty towards the state to disclose post mortem findings (James and Leadbeatter, 1996). Another conflict consideration arises between the deceased's interest to confidentiality and their living relatives' right to information.

Access to an autopsy report is another ethical issue slightly touched on in the article by Matthews and Marthino, *Patient-Physician Confidentiality: 'Til Death Do Us Part?*' (2012), as well as by James and Ledbeatter (1996). The restriction of access to autopsy reports is also clearly emphasised in the National Code of Guidelines for Forensic Pathology Practice in South Africa, in paragraphs 46 to 54. The HPCSA highlights the importance of written consent from the next of kin regarding divulging the deceased's medical information (booklet 10, p. 3).

The significance of confidentiality becomes especially problematic once a public figure's death is in question. This is clearly dealt with in the article by McQuoid-Mason concerning the death of pop singer Michael Jackson, which resulted from the illegal administration of anaesthetics, at Jackson's request, to relieve insomnia (2012). Many times, there is a fascination of the public with the death of a famous person. Foltyn discusses this dichotomy between the public and the deceased celebrity in his fascinating article, *Dead famous and dead sexy: Popular culture, forensics, and the*

rise of the corpse (2008). The public feel they have a right to also know why the celebrity death has occurred. The public's interest is in direct contrast to the deceased and their families' interest to have their confidentiality upheld, in most of cases.

The protection of confidentiality is linked to autonomy. Engelbrecht explores the ethical and legal perspectives in relation to autonomy, as related to informed consent and protection of the patient's confidentiality, within our South African context (2014). These South African governing structures included the Constitution, HPCSA guidelines and South African Medical Research Council (SA MRC) guidelines. These structures are discussed in relation to individual autonomy, including upholding confidentiality irrespective of issues such as illiteracy and within diverse cultures (Engelbrecht, 2014). He concludes that autonomy needs careful deliberation within these guiding frameworks to respect the individual's right, whilst still considering other factors such as justifiable reasons why confidentiality can be breached (2014, pp.34, 39). An example of a health issue that confronts confidentiality and the limits thereof, is the deceased's Human Immunodeficiency Virus (HIV) status. The deceased's right to confidentiality ends where next of kin or immediate partner is at risk; this is true for genetic information (see below), but also in the disclosure of HIV status. Wildfire, Stepping and Gazzard (2007) explore the concept of the deceased's right to confidentiality specifically in the context of HIV. The rights theory to the access of health care information in the dead is explored. Access to information remains a question in post mortems following deaths occurring in the intensive care setting as well, where an initial cause of death is not apparent (Rigaud et al, 2011). The HIV status may or may not be relevant to the cause of death determination in the forensic context too and is clearly an ethical challenge even after demise. I will discuss confidentiality and limits thereof, as related to the deceased, in more detail in chapters 6 and 9.

Cause of death interests:

An important confidentiality concern is related to a genetic diagnosis that can impact the surviving family. There may be good reasons why the deceased may have a post mortem interest not to have this revealed, but the impact of a specific genetic diagnosis on the surviving relatives always needs to be considered. Most of the articles I consulted agree that the family should probably be informed, especially if it can impact the health of siblings (James and Leadbeatter, 1996; Mathews and Martinho, 2012; Michaud, Fellmann, Abriel, Beckmann, Mangin and Elger, 2009; Rigaud, Quenot, Borel, Plu, Hervé, Moutel, 2011). The authors Michaud *et al.* specifically examined the post mortem genetic analysis as associated with sudden cardiac deaths in *Molecular autopsy in sudden cardiac death and its implication for families: discussion of the practical, legal and ethical aspects of the multidisciplinary collaboration* (2009). They concluded that more international guidelines were still required surrounding post mortem genetic testing and a multi-disciplinary approach was needed "*in order to make this tragedy easier for families, to prevent additional deaths in surviving family members, and in the interest of public health.*" (2009, p.717).

With advanced technology and gradual access to more affordable genetic tests, the questions around the inclusion of these available tests become important. The inclusion of genetic testing not only pertains to confidentiality, it may even be a post mortem interest of the deceased to have their exact cause of death known. As genetic tests become more widely available and affordable, the incorporation of these would need to be considered in addition to existing examinations to accurately determine the cause of death. The forensic doctor cannot remain ignorant of medical advances, including the field of genetic testing (Michaud *et al.*, 2009). This is especially relevant in sudden death cases of children and younger adults and can possibly aid in the consolation of the grieving parents and family.

At this stage it is important to briefly mention that all interests the deceased may have, such as in relation to accurate genetic diagnosis, must be weighed against the resource limitations of our country and the forensic services. A study by Du Toit-Prinsloo, Dempers, Verster, Hattingh, Nel, Brandt, Jordaan, and Saayman, entitled *Toward a standardized investigation protocol in sudden unexpected deaths in infancy in South Africa: a multicenter study of medico-legal investigation procedures and outcomes*, found a lack of consistency in relation to the investigation of sudden, unexpected deaths in infants (SUDI) amongst the medico-legal facilities (2013). The need for a standardised approach nationally to deal with sudden and unexpected death cases, particularly infants, needs to be advocated. It would be important to consider the inclusion of genetic testing of infants for common genetic aberrations. Examples would be genetic metabolic or cardiac abnormalities that could contribute towards a cause of death determination. Obviously, these tests need to be considered in light of the resource constraints. Another South African article, by Tiemensma and Burger (2012), exploring sudden, unexpected deaths in adults (SUDA) also noted the resource limitations affecting forensic services and the number of performed autopsies in general. This ethical dilemma will be more closely examined in chapter 7 in terms of distributive justice. I will illustrate how resource constraints do, in fact, directly influence the deceased and their interest in relation to their cause of death determination.

Respect for ante mortem wishes:

So far, in highlighting possible retained interests of the deceased, I have argued that the deceased has a retained interest in bodily integrity being upheld, identification confirmed, confidentiality and privacy respected, and their cause of death determined. I will now discuss the last interest I think should be considered in the deceased. This pertains to having their ante mortem wishes upheld. I will show that this is an ethical issue needing more reflection of the legal requirements.

“It is widely held that the death of a person does not extinguish the interests of that individual. Indeed, family members, and others who have physical possession or access to an individual’s body, tissue or cells, have to respect certain obligations and rights following the death of the individual.” (Knoppers, Saginur and Cash, 2006, p.358).

The ante mortem consent issues related to the bequests of a body, to example *Body Worlds* or university anatomy departments, are not often encountered in the forensic arena. The important ethical issues in relation to ante mortem wishes would pertain to organ donation, research, and tissue retrieval for various reasons, including judicial, research, teaching and archival related.

The high demand for organs necessitates focused deliberations around ethical problems that may occur. McLean wrote an article about the distributive aspect of organ donation and the systems in place for procurement and fair distribution thereof (2005). Concerning this discussion, McLean remarked, *“we need to tell our loved ones of our wishes about end-of-life care including organ donation. Moreover, we need not interfere in the fulfilling of our loved one’s wishes to be a donor”* (McLean, 2005). I think herein lies the crux of upholding ante mortem interests, namely, that ante mortem wishes should be communicated to loved ones prior to demise. If these interests can be in a written format, such as a living will, this is even better, as it precludes relying on recollections by the grieving family post mortem. The National Association Medical Examiner’s (NAME) position paper on organ transplants as related to forensics is helpful here, as it describes in detail the various circumstances under which organs and tissues can be harvested and released (Pinckard, Wetli and Graham, 2007). The ethical challenge for the forensic doctor is well conveyed in the following balancing act: *“the medicolegal responsibility centred on the decedent with the societal responsibility to respect the wishes of the decedent and/or next of kin to help living patients”*

(Pinckard *et al.*, 2007, p.202). The paper concludes that most organ harvesting, and tissue procurement can commence if there is an environment of good communication between the parties involved, if the medico-legal examination is not compromised, with only a few rare exceptions (Pinckard *et al.*, 2007). Their final sentence is a refreshing look at the deceased from an organ donation viewpoint: “*Although our primary function is to investigate death, enabling transplantation is one of the few opportunities we have to directly save and improve lives*” (Pinckard *et al.*, 2007, p.206).

I will now discuss research and the deceased, with regards to upholding ante mortem wishes. The key to research in the deceased lies in the consent conundrum. The deceased preferably had to express a desire ante mortem to partake in research, as the consent aspect is vital to research and cannot be obtained after demise. If the deceased did not give permission prior to death, the family should be consulted. I already alluded to the post mortem harm that can ensue if consent was negated – as illustrated in the Alder Hey affair and the Green Lane ‘heart library’, as well as in Henrietta Lacks’ case. It is essential to get consent from surviving family prior to research. The problem arises when there is an unidentified body, with unknown ante mortem interest against or for research, and no third party to speak on their behalf. I would say the essential point is to err on the side of caution; i.e. rather exclude the unidentified deceased from research.

An excellent article related to research interest and the deceased is Nelkin and Andrews’ *Do the dead have interests? Policy issues for research after life* (1999). The article highlights how past research on the dead, in many cases, disregarded the cultural and religious circumstances surrounding the individual or group of individuals. “*The cases we present suggest that there may be important reasons to recognize the individual and social values at stake in the dispute over research on the dead.*” (p.290). Wilkinson’s “*Last rights: the ethics of research on the dead*” (2002) and Jones’ “*The centrality of the dead human body for teaching and research – social, cultural and ethical issues*” (2011) are both useful for this. Jones addressed general research related questions, including the Alder Hey affair and Green Lane Hospital, as well as the deceased body in relation to teaching.

Mass disasters not only hold forensic significance, in terms of the identity and cause of death of the deceased but can have ethical significance regarding research too. The implication of research conducted on the deceased’s bodies in the event of a mass disaster was explored and researched by Knopper *et al.* (2006). They proposed three possible avenues of research. The first was in relation to forensic research to develop better methods of identifying victims. The second research avenue was in disease-related research to examine frequency of pathologies in population groups such as cancers, heart diseases and so on. Lastly, they proposed that epidemiological studies would also be useful. They examined the ethical norms that governed the secondary use of samples from vulnerable groups as to extrapolate these guidelines to the mass disaster victims. Their conclusion was that research needed informed consent and should be anonymised as far as possible, especially if consent was not obtainable. The authors believed that secondary research was possible on mass disaster victims “*without compromising the dignity, autonomy and rights of the victims and their families*” (Knoppers *et al.*, 2006, p.353). The ethical premise was built on respect for autonomy and consent together with the prevention of exploitation.

McGuire *et al.* reflected that living individuals giving consent for their bodies to be used in research may also experience present harm “*in anticipation that their corpse will be treated in ways that violate their values or beliefs.*” (2010, p.318). Their article was written in relation to cadaveric specimens in research, especially the many genome projects currently underway. This is a definite modern day ethical issue that will only increase in significance as time proceeds. The discussion

surrounded the individual consent mechanisms, privacy, and the need for institutional policies to protect the families and deceased individuals. The reflection upon possible ethical issues regarding research is important, as the deceased is ‘a vulnerable group’ – the deceased cannot give consent once dead and relies on next of kin. Forensic doctors need to be aware of the possible ethical risks in future research and have mechanisms in place protecting the deceased while ensuring excellent research.

It is important to also consider the limits of upholding ante mortem wishes. There are obviously legal limitations of upholding all ante mortem requests – such as laws regarding burial of the body. A wish, for example, to be buried in a school ground or other public domain not earmarked for burial is not only questionable, but illegal as well. Limits are mostly for public safety too, such as in the case of a highly infectious disease like Ebola, which would require a different way of disposing of bodies, to negate infectious risks to the living. If legal and public safety concerns are excluded, cultural or religious limitations may exist as well. An example may be if the deceased had converted to Hinduism and wanted to be cremated, but their Jewish family objects based on religious belief. These requests may pose as limits initially but can be overridden if deliberated well. The case in favour of the deceased would be more substantial if the ante mortem wishes are in a written format. Obviously, oral indication alone of a request can be a limitation thereof.

Beyond legal, cultural, or religious influences other ideas can also influence decision making. A good example of where different ideas and opinions surface is with controversial topics such exhibitions like *Body Worlds* (Hermann, 2011; Jones and Whitaker, 2009; Jones, 2011; Miah, 2004). Many people are against it, while others are in favour. Some people would not mind donating their body for the exhibitions or even a live broadcast dissecting, and others not. Miah’s article, *The public autopsy: somewhere between art, education, and entertainment*, exposed possible limits to ante mortem wishes with regard to the public autopsy: “*unfortunately neither the Body Worlds exhibition nor the public autopsy was a reaction to post (modern) humanity or a meaningful re-engagement with death, through the medium of the body*” (2004, p.578). The most important outcome of the exhibitions he felt, was “*the realisation that people do not understand or engage with important aspects of their medical identities. Death matters, but it is a concept that is alien to people and childishly fascinating.*” (Miah, 2004, p.578).

Two controversial ante mortem wishes concern gamete retrieval post mortem. Weber, Kodama and Jarvi reflect upon a case reported of a young man who died in a motor vehicle accident (2009). The wife and family requested post mortem sperm retrieval for a possible future pregnancy. As I mentioned above, a request that is not written poses a limitation. In the deceased young man’s case there was no written request. This was the hospital’s ethical review board and legal advisors main concern too, and that sperm retrieval might in fact contradict the actual wishes of the deceased young man.⁴ This case highlights the importance of written informed consent that is required from the deceased, as well as extensive ethical and social considerations in each case. The second case involved the harvesting of eggs from a deceased girl in Israel, as discussed in *Harvesting Dead Girls Eggs Raises Ethical Issues* (Conley, 2011). The uncomfortable questions of a child being born via a surrogate and their knowledge that their mother had died even before their conception just does not “feel” right for most individuals. Upholding this request involves a lot of ethical deliberation. Very few people would give consent prior to death for the removal of reproductive cells. The girl was a minor, aged seventeen, when she died in the car accident; one also wonders whether a minor would have had “*the capacity and maturity to meaningfully assert an*

⁴ The outcome of the case was that the widow decided against the sperm retrieval after much discussions, including the costs of fertility treatment and raising the child without a biological father.

interest in motherhood after her death" (2011). The Israeli court's decision, to allow the family to harvest her ova after death, was first of its kind in the world then. The fact that retrieval of sperm or ova can be done medically post mortem does not necessarily make it ethically justified.

Pathology specimens retained, ranging from as histological tissues to toxicological specimens, are generally discussed in The National Code of Guidelines for Forensic Pathology Practice in South Africa (2007, pp.18-22). No specific guidance or detail is given in terms of retention of larger organs, such as brains or hearts, though the collection thereof is warranted if indicated, as per the NHA. It is unfortunate that larger organs have not been dealt with specifically. This will be discussed later in the thesis. I found the summary in the ethical article regarding anonymous, archival human material by Jones, Gear and Galvin insightful and applicable: "*while respect for human material should be universal, regulations governing its retention and use should be most demanding for brains and hearts, and least demanding for tissue blocks and histology slides.*" (2003, p.346).

3.4 Conclusion

In this chapter I argued that ethical issues do exist in the South African forensic medicine context and I briefly explored some of these. This chapter succinctly answers the first question of my thesis, namely, *do ethical issues exist in the field of forensic medicine in the South African context, and what are some of these issues?*. It is clear that dual loyalty and post mortem harm are major ethical concerns; not only historically as per the examples of Steve Biko, Henrietta Lacks, Alder Hey and Green Lane Hospital; but also, currently. I divided the current ethical issues in forensics into two main categories. First, the issues related to dual loyalty concerns, and secondly, issues regarding retained post mortem interests of the deceased. The issues in the forensic context are complicated due to the multiple role players involved. A few of these include the deceased, the grieving relatives, the forensic doctor, and the legal entities such as police and officials of justice.

Under the first category, the current dual loyalty concerns involve the deceased and the judicial system, under which the forensic doctor works. Even with laws and professional guidelines the possibility of coercion is not excluded. The epitome of justice is when the forensic doctor is serving the court objectively as an expert witness, by upholding scientific accuracy, impartiality, and the whole truth.

The ethical issues related to retained post mortem interests was discussed secondly. The retained post mortem interests included discussions around upholding bodily integrity of the deceased by respectful and dignified treatment of their bodies post mortem. Harm can ensue if bodily integrity is not upheld. The deceased's body represents an individual person that once lived and should be respected as such. This interest ties in well with the second discussion related to retained interest in identification. No one wants to die as an unknown person, but as a known individual. This is particularly significant for loved ones of missing people to be able to fully grieve and mourn. The third retained interest of the deceased was related to post mortem privacy and confidentiality concerns. The importance of confidentiality remaining after demise was reiterated. Certain medical information may be important for the determination of the cause of death and under specific circumstances should be revealed.

The retained interest in the cause of death determination was argued as well. The importance of an accurate diagnosis in death was noted. Genetic advances have also led to possibilities not previously considered. The incorporation of certain affordable genetic tests into standard autopsy practices in certain scenarios needs to be further explored. A genetic diagnosis can aid in the

accurate diagnosis of cause of death, such as in sudden infant death syndrome (SIDS)⁵ cases but can also have far reaching consequences for the surviving relatives, such as knowledge of previously undiagnosed inherited conditions which may impact other family members.

Having ante mortem wishes upheld after death was discussed as the last retained interest. This can be important from a legal point if related to a will or advanced directive. Differences between the deceased's wishes and the surviving family's ideas need to be considered.

⁵ Sudden infant death syndrome (SIDS) falls under the umbrella term of SUDI. It is the sudden, unexplained death, usually during sleep, of a seemingly healthy infant, usually below one year of age. This is a definition of exclusion where no cause of death was ascertained after a thorough death investigation. Also known as crib- or cot deaths (Afrikaans: wiegie sterftes)

Chapter 4: Exploration of ethical theories for a framework in forensic medicine

In this chapter, I will argue that the principlist approach (or mid-level theory) of Beauchamp and Childress can be used as an ethical framework to address ethical issues in forensic medicine. The main arguments for using this approach will be stated at the end of this chapter. The second question of my thesis pertained to finding a guide to help analyse ethical dilemmas in forensics. The question was: *If there are ethical issues, how can they best be identified and explored?* The main goal of this chapter is, therefore, to explore, briefly and critically, some of the well-known ethical theories or approaches in the biomedical ethics field. I will also evaluate each one in relation to an area within forensic medicine as part of my search for a useable framework from which to explore ethical issues in this field. A crucial consideration in the forefront of my mind in the analysing of these frameworks was the South African legal justice system. This is critical as the legal environment forms the foundation of forensics, as illustrated in the introductory chapter.

In the subsequent chapters I will utilise the chosen framework in exploring the key ethical issues within forensic medicine which I identified in chapter 3. This is no small task. The attempt to identify a suitable framework, much like my attempt in addressing the moral status of the deceased in chapter 2, is a huge topic worthy of an entire master's thesis. Thus, as with the arguments for moral standing and the deceased, I can only attempt to give an overview.

Searching for a framework

The chosen framework must preferably be simple and easily understood. Beginning with an exploration of well-established theories and approaches in ethics simplifies the process. At the end of this thesis, the chosen framework may, or may not, be deemed sufficient to answer the questions I have posed for deliberation. There may be a need to search for a new framework or method, and that is fine. Most importantly is that a start is made in addressing this important and neglected bioethical field of medicine.

The moral theories and approaches I specifically reflected upon in this chapter are commonly used in the field of medicine today. Beauchamp and Childress echoed this sentiment: "*much is to be learned from each*" (2013, p.352). I do not propose that other theories have no relevance, but these are at least already well discussed and reflected upon in the literature. Most of these theories have proven to be significant thus far in bioethics and that is what influenced my choice in their selection.

Saad (2017) illustrated that since antiquity "*trust and permission-giving*" were a part of medicine and warns, like Tsai (1999, p.321), that doctors should continue to "*see patients as persons*" (Saad, 2017, p.12). Therefore, any medicine discipline should reflect upon ethical issues, and consider the patient or deceased as moral entities (chapter 2), while upholding the actions of the doctor as a moral agent with scrutiny too. Beauchamp critically reflects upon the role of bioethics in, *Does Ethical Theory have a Future in Bioethics?* (2004). This is an important question as "*philosophical literature largely evades the central context in which the distinction arises in bioethics – real encounters between doctors and patients – and, as a result, the analyses turn out to be too pure and general to illuminate*" (Beauchamp, 2004, p.215). His critique of ethical theories in general is that they lack applicability to real practice. This was kept in mind in this thesis, which specifically aims to suggest a framework to use in bioethics discussion in forensic medicine. I will aim to illuminate ethical dilemmas in forensic pathology, by use of the chosen framework. Without practical exploration any chosen approach will remain, as Beauchamp (2004, pp.215-216), Saad (2017) and Tsai (1999, p.320-321) so aptly point out, mere theory without practical applicability. The link between theory and practical issues is paramount. Therefore, this chapter is foundational

to the thesis, as are the following chapters seeking to explore the practical applicability of this framework.

“Ethics provides answers about what we ought to do, given that we are the kinds of creatures we are, caring about the things we will care about when we are as reasonable as we can be, living in the sort of circumstances in which we live. This is not as much as we might want, but it is a lot. It is as much as we can hope for in a subject that must incorporate not only our beliefs but our ideals as well.” (Rachels, 1980, p.39). This quotation captures for me the essence of ethics in trying to extrapolate ethical theories to the biomedical field, and in attempting to give answers to difficult situations. No one theory has all the answers, but all theories discussed below attempt to answer the *“what we ought to do”* kind of questions raised by Rachels.

Theories, approaches, frameworks, and codes?

Prior to explicating the ethical theories, I will briefly explain my understanding of an ethical theory. Also note that the words moral and ethical are used interchangeably in this chapter. Ethical theory is simply an approach to addressing moral issues. Rachels says that ethical theory is concerned *“with questions about ethics”*, where ethics in general *“attempts to provide directions for conduct”* (1980, p.32). This ethical theory is then utilised as a framework, with specific rules set out to help guide actions in moral decision making. According to Beauchamp and Childress, moral theories usually refer to *“abstract moral reflection and argument, systematic presentation of basic components of ethics, an integrated body of moral norms, and a systematic justification of basic moral norms.”* (2013, p.351). Also, important: *“ethical theories should not be expected to yield concrete rules or judgements capable of resolving all contingent moral conflicts. No theory has such power”* (Beauchamp and Childress, 2013, p.424). For them, the place for moral theories is the exploring of the common morality with a view to seeing how this pertains to the biomedical sphere and helps to structure *“principles, virtues, and rights”* therein.

Other authors, such as Arras (2010), assert distinct differences between the so-called philosophical theories for general ethical issues, and other theories for bioethical concerns. Arras regards the philosophical theories, mostly academic in nature and focused on the theoretical, as high theory. It is here that he places utilitarianism and Kantianism. On the opposite end of the spectrum are the more practice-orientated approaches of applied ethics (2010). It is here that the mid-level theories such as principlism, and anti-theories like casuistry and narrative ethics, have a role to play. Although I am aware that many authors do not regard principlism as a theory, I will still use the word “theory” in conjunction with principlism in the text to come. The terminology related to the term “principlism” is author-dependent, with principlism variously being referred to as a theory, mid-theory, or approach. For example, Beauchamp categorises principlism as an ethical theory when referring to *“normative philosophical theories of moral life”* (2004, p.209) and Saad also sees it as *“a theory of medical ethics”* (2017, p.1). Gillon regards principlism as a *“moral analytical framework”* (1994, p.184), Ssebunnya as *“the action-guiding practical analytical framework”* (2015, p.16) and Tsai as an approach (1999, p.315). This thesis is not concerned with discussions of terminology; rather, it aims to utilize principlism’s four principles within the bioethical context of forensic medicine.

Ethical codes and guidelines were also evaluated in this discussion of ethics in forensic medicine. A code of conduct focuses on behaviours. The main reason medical codes, oaths and guidelines cannot be considered as practical frameworks was raised by Ssebunnya (2015). He mentions that they are not *“modes of concretizing methodological ethical analysis”* and they do not have an underlying ethical theory as foundation (2015, p.17). Mario (2002) reviewed professional forensic codes of ethics in the United States. Even though the article was concerned with the forensic

sciences field, the applicability to extrapolate his findings to the forensic pathology field can be argued. His key finding was that universal core values need to be incorporated into all codes, as he found large discrepancies between the different available codes at that time. Like Ssebunnya (2015), Mario concluded that many codes reviewed lacked “*a comprehensive structure*” and that this “*diminish[es] the codes’ professional cogency*” (Mario, 2002, p.111). Nyberg also felt that ethical codes can create a false impression to people, namely that by following a code of conduct they must be “*acting ethically*”. But he argued that without critical reflection and application of phronesis (to be discussed below), this method of blindly following rules is fallible (2008, p.588). Van Niekerk and Nortjè (2013) also echoed this and argued for an ethics of responsibility approach. They wrote that morality is not determined only: “*by rules, codes and laws behind which people can comfortably hide*” (2013, p.28).

One way of broadly categorising ethical theories is to divide them into those concerned with conduct and those concerned with character. This was a distinction made in an article by Hursthouse (1991). Although Hursthouse was primarily concerned with virtue ethics in relation to the contentious ethical discussion around abortion, she laid out some differences related to ethics of conduct and ethics of character worth mentioning here (1991). The ethics of conduct approach related to actions taken, whereas the ethics of character approach was concerned with the virtuous person. The conduct-based theories ask the question: *What should I do?*, while the second group focuses on the question: *What sort of person should I be?* (Hursthouse, 1991, p.227). I will now explore some possible theories to use as a guide in making decisions and assisting in deliberation. To decide which theory or approach is most fitting for these purposes is never easy, especially in applied ethics.

4.1 Utilitarianism

Utilitarianism forms part of the ethical theories of conduct and more specifically the category of consequentialism. It is a “*high theory*” according to Arras (2010), with true roots in philosophy. According to the Hursthouse definition above, it is related to ethics of conduct in relation to your actions resulting in more benefit to more people. The question being asked is, “What action will result in better consequences for the majority?”. Very basically, then, this is concerned with the consequences of your actions as the sole indicator of what decision needs to be taken. “*An action is right if it promotes the best consequences...the best consequences are those in which happiness is maximized*” (Hursthouse, 1991, p.225). The best possible outcome for the greater majority would be the goal. The utilitarian theory derives from the teleological ethics of ancient Greece, with *telos* referring to the end or outcome (Walker and Lovat, 2016, p.154).

It is quite apparent from the onset that the theory is about measuring outcomes; it is a results-based ethical approach to any given situation. The determination for what will be the best way to act in any situation will, therefore, be the act that gives the best outcome. The outcome or result is based on the concept of utility, and therefore equates the right choice ethically with the one that produces the most benefit and the least unhappiness for the largest number of people. The specific greatest benefit or maximal value, such as welfare, happiness, pleasure, health, beauty, success, understanding or freedom (to mention but a few), are all forms of the concept of utility.

McMahan stated the extent of act consequentialism: “*Most consequentialists...have always maintained that it is permissible to intend to cause bad effects when this is a necessary means of producing the greatest good.*” (2009, p.345). A permissible example could be torture or even killing of a few if the majority would go unharmed. Sandel (2009, p.18) provides such an example that occurred in Afghanistan, where American troops captured three goatherders and contemplated among themselves if they should let them go or kill them. In the end they let them go, to the

ultimate detriment of the entire team, as the goatherders informed the Taliban of their position. The negative outcome led the surviving commanding officer to regret the decision not to act in a utilitarian manner, namely to kill the few (three) to save the many (his troop).

The fathers of the theory of utilitarianism are Jeremy Bentham (1748-1832) and John Stuart Mill (1806 – 1873). Michael Sandel's essay, *Justice: What's the right thing to do?*, provides a good summary of the key principles of utilitarianism (2009, pp.22-34) Bentham felt so strongly about his maximised utility that he proposes all other theories, even unconsciously, also aim for utility. This was well stated by Sandel: *"Every moral argument, he [Bentham] claims, must implicitly draw on the idea of maximizing happiness. People may say they believe in certain absolute, categorical duties or rights. But they would have no basis for defending these duties or rights unless they believed that respecting them would maximize human happiness, at least in the long run."* (2009, p.23). Mill expresses utilitarianism slightly differently from Bentham in his essay *On Liberty* (1859). In it, he defends the *"individual freedom in the English-speaking world. Its central principle is that people should be free to do whatever they want, provided they do no harm to others."* (Sandel, 2009, p.30). Mill argues that, eventually, the liberty associated with individual utility will be beneficial to the greater society. Mill also argued that not all pleasures derived are equal; there exists a hierarchy of pleasures.

In summary, two principles can be derived from utilitarianism as an ethical theory. Firstly, the outcome of the choice determines the rightness or wrongness of a choice. Secondly, the greater the benefit of the choice, the greater and more correct is the action.

Specifically, in rule utilitarianism an act is assessed as good or bad based on moral rules; in other words, common law is considered. An action is then regarded as acceptable morally if the common law generally accepted by that community is upheld with the best consequences. For example, to always tell the truth can be seen as a moral guiding rule.

Sandel recounts an example of utilitarianism that is worth repeating here (2009, pp.22-23). After sinking in a storm, the Mignonette left four survivors stranded in the middle of the Atlantic in a lifeboat. The food rations were depleted rapidly. The youngest, a cabin boy, drank sea water against advice and became gravely ill. On the twentieth day, the cabin boy was killed so the others could survive. Three people survived the ordeal, but one was killed to accomplish this. The utilitarian would argue that this course of action was justified, as the greater number of people benefited. *"It accepts the utilitarian assumption that morality consists in weighing costs and benefits, and simply wants a fuller reckoning of the social consequences."* (Sandel, 2009, p.22).

Strengths of utilitarianism:

One of the greatest benefits of utilitarianism is that it focuses on the majority rather than the individual. Secondly, it does not consider the character or previous actions of an individual. This can be beneficial as it is a non-judgemental theory and gives everyone a similar standing without prejudice against or pre-conceived ideas of individuals playing a role. It can be a theory to use for the promotion of research, with the motivation thereof is benefit to many.

Weaknesses of utilitarianism:

As with most high theories, utilitarian theories are in *"seemingly endless and intractable disagreement"* with other counterpart high theories, such as Kantianism (Arras, 2010, p.6). Even among rule utilitarians and act utilitarians there are quarrels.

A key concern with regards to utilitarianism is that the future is uncertain, and no one can accurately predict the consequences of actions. Utilitarianism can also potentially be unjust and unlawful. When an immoral action is justified because it will have the most benefit to most people, can it be right? Can killing a prisoner be warranted, to distribute many of his organs to waiting organ transplant patients, just because he is imprisoned? It is very difficult to compare the best possible outcomes. Individuals attach different values to good consequences. Using the concept that the majority will benefit, to promote research for example, cannot always be good either (Nelkin and Andrews, 1998, p.276).

This is well illustrated in the excavation of Native American burial grounds, with government endorsement, in the United States from the late 1700s until the early 1900s (Nelkin and Andrews, 1998, pp.269-270). This was done in the name of "science" for various reasons, including the very controversial cranial studies. Clearly, political will combined with poor "research" culminated in unethical outcomes.

Another argument against utilitarianism is related to the neglect of the individual for the multitude. Individual rights are disregarded. This could also lead to individual people, or minority groups of people, being treated in ways that contradict basic respect and dignity (Sandel, 2009, p.23). An example here is the gladiator fighting in the arena (the majority of whom were slaves) and dying for the amusement and greater happiness of the approving crowd. The same argument can be made about sanctioning torture to an individual to obtain information about a bomb, so the multitude can be saved.

Another objection by Sandel to utilitarianism is related to not all utilities being equally valuable. People attach different values to different outcomes. If monetary value makes one person happy, this might not be so for the next person. "*For critics of utilitarianism, however, our hesitation points to something of moral importance—the idea that it is not possible to measure and compare all values and goods on a single scale.*" (Sandel, 2009, p.28)

Consideration in forensic medicine:

When one considers the laws related to forensics, one could argue that the utilitarian theory is in accordance with the law. Most laws are based on trying to bring the most benefit (absence of crime, as an example) to most of the population. In these terms, a utilitarian approach to understanding forensics could also work, especially when considering rule-based utilitarianism.

Forensics already uses somewhat of a utilitarian approach, as *all* unnatural or suspicious deaths need to be investigated medico-legally. This is because of the greater advantage this has for the community and the criminal justice system. The autopsy needs to happen regardless of the concerns, belief systems or culture of the deceased's family. Unfortunately, the disregard for the wishes of the deceased or family members, is for the greater community safety. Many of the outcomes that this theory addresses, such as pleasure, health, and success, are very difficult to bring into the sphere of forensic medicine as the deceased cannot directly benefit from them. However, if the utilities are justice and fairness, which are again difficult to interpret, then maybe this theory could be useful.

The Green Lane Hospital 'heart library' may be interpreted from a utilitarian perspective as well. The organs were retained for the greater good of society, instead of the family. The Green Lane 'heart library' with 1300 hearts was kept for the primary benefit of education (Jones, 2011; Skegg, 2003). The large repository of hearts with congenital defects aided significantly the advancement of this technical and difficult cardiac surgery field. One can probably argue then, that by initially taking the utilitarian approach and keeping the hearts, irrespective of parental consent, the greater good

was achieved overall to many more. The greater good included the children that benefit directly from well-trained surgeons and the families of these children, as their chance of survival increased with the advanced surgical capabilities.

4.2 Kantianism

The German philosopher, Immanuel Kant (1724-1804) is considered the founder of the theory of deontology, hence this theory is known as Kantian Deontology or Kantian theory. It is also referred to as “rule morality” or “non-consequentialist theory”. The word deontological comes from the Greek word *deon* which means “binding duty”; i.e. duty should be done for duty’s sake. Saad states that, to Kant, “*the moral imperatives can be deduced from a priori moral law, the categorical imperative (CI), which tells us to act in the way which we would be a universal rule*” (2017, p.17) Kant “*offers an alternative account of duties and rights...It does not depend on the idea that we own ourselves, or on the claim that our lives and liberties are a gift from God. Instead, it depends on the idea that we are rational beings, worthy of dignity and respect.*” (Sandel, 2009, p.58). In contrast with utilitarianism’s greatest happiness as goal, Kantianism establishes that each person is respected as an end in themselves.

Deontology strongly advocates that every deed has intrinsic moral worth. “*An action is right if it is in accordance with a moral rule or principle.*” (Hursthouse, 1991, p.224). This means the acts of lying, killing, and stealing, for example, are wrong and cannot ever be justified. Certain acts become binding rules; for example, the rule of truth telling or integrity. It can be derived from the deontological theory that when our motive is right the deed will thus be moral, with the main motive being to do your duty. Ascertaining the motive in relation to killing in war versus killing in terrorism is complex (McMahan, 2009; Norman, 1995; Sandel, 2009). What makes the act of killing, for example, permissible in the one and not the other? Making a distinction is difficult in light of classifying all acts of killing as unjustifiable, as would strictly be the case in deontology. Could a right motive make certain acts of killing permissible?

In summary: “*According to Kant, the moral worth of an action consists not in the consequences that flow from it, but in the intention from which the act is done. What matters is the motive, and the motive must be of a certain kind. What matters is doing the right thing because it’s right, not for some ulterior motive.*” (Sandel, 2009, p.61). To do the right thing for the right reason will be the morally right deed to do. Although, as we have seen with the example of killing, the motive can result in different outcomes. This was also emphasised by Rachels: “*it is the difference between the motives, and not the difference between the acts themselves, that is morally significant*” (1980, p.37).

Strengths of Kantianism:

One of the most significant strengths of deontology lies within the second categorical imperative of treating people as ends in themselves and not merely means to an end. Individuals are regarded highly and not viewed as the means by which some favourable outcome may be attained. Secondly, choices are based on duty, making the theory very consistent.

Sandel gives an example of students that were encouraged not to cheat in their exams (2009, p.62). As an incentive to boost honesty, discount cards were given to students who signed the pledge. Obviously, if truth and honesty are bought at a price, then the moral value of the required action is questionable. Most of us would agree that bought honesty lacks moral worth. To do good based on monetary gain alone proves Kant’s point. This case illustrates “*the plausibility of Kant’s claim that only the motive of duty-doing something because it’s right, not because it’s useful or*

convenient-confers moral worth on an action." (Sandel, 2009, p.62). Valuing the motive behind action can be a strength, as the above case illustrates. The problem is that the motives of moral agents can be contradictory, as we will see below.

Weakness of Kantianism:

The above-discussed example of terrorism versus war, and even euthanasia, are complex issues involving killing as an act (McMahan, 2009; Norman, 1995; Rachels, 1980; Sandel, 2009). The motives associated with "acts of killing" can be so varied that practical application of Kantianism is extremely difficult. To enforce a binding duty, such as not to kill, and yet at the same time link it to motive, can be very contradictory.

The Kantian axiom that the only morally justifiable actions are those done out of duty exposes another weakness within Kantianism, namely that "*when we assess the moral worth of an action, we assess the motive from which it's done, not the consequences it produces. If we act out of some motive other than duty, such as self-interest, for example, our action lacks moral worth*" (Sandel, 2009, pp.62-63). The motive of a decision is not always known or even good, as everyone's rationale is different. As example is the Alder-Hey affair, where the pathologists who kept the children's organs could have argued that it was their moral duty to advance science (Arcus and Kessel, 2002, p.1495). Or in the case of the 1 300 hearts of Green Lane Hospital's 'heart library' in Auckland, the rationale could be improving cardiac surgery techniques to reduce overall mortality rates (Jones, 2011, p.20). Secondly, duties can conflict, as with *well-known inquiring murder*, where truth telling jeopardises the person hiding from the murderer. Only deeds performed out of duty have moral significance according to Kant, making this theory impersonal too.

Consideration in forensic medicine:

The forensic doctor's work is very duty-orientated. The duty to tell the truth is one that is emphasised a lot in the literature (Matejić and Otasević, 2010, p.775; Tarboda, 1999, p.196; Walsh, 2004, pp.53,58; Wildfire *et al.*, 2007, p.473). In fact, the entire field is dependent upon the basis of truth. Serbian authors Matejić and Otasević wrote an article entitled *Ethics and Deontology in Forensic Medicine* (2010). They argued that doing the right thing for the right reasons would be the morally "right" thing to do in each situation. Deontology was one aspect of this article, but I found it overlapped with the ethics of virtue as well.

A conflict can arise between a duty to confidentiality and the duty to truth telling. This conflict is well explored in the article by Wildfire *et al.* (2007) in relation to the deceased's HIV status. If HIV was directly related to the cause of death it should be noted on the death certificate, but what about the impact on the family as stigma is still attached to this revelation? What if this truth telling is in direct opposition to the deceased's last wishes not to tell the family? If it was a sudden, unexpected death (referred to forensics for determination of cause of death), then maybe the wishes of the deceased are not known. With all the role players involved in forensic medicine there are going to be conflicting duties, as this case clearly illustrates.

An article by De La Grandmaison *et al.* (2012) considered ethical matters related to forensic pathologists who were involved in forensic investigations of the mass graves resulting from war crimes in the previous Yugoslavia. In this article, they mentioned the importance of the doctor to adhere to the obligation nature of their task as posed by deontology; namely, to be impartial. They regarded the nature of these examinations as intense and difficult under the circumstances, and they needed to do their duty without being influenced by political and other agendas.

4.3 Virtue ethics

It is believed that the great ancient Greek philosopher, Aristotle, significantly influenced this theory. Virtue ethics is also known as character ethics or Aristotelian virtue ethics. This theory focuses on the person's character and what sort of person the doctor is, rather than judging the action/s of that person. It is a theory that moves "*away from rules and principles to ideals*" (Baron, 1993, p.387). In other words, the outcome of the action is determined by the virtuous character of the person that performs the act. Van Niekerk offers the following definition of virtue ethics: "*...virtue ethics requires us to be less concerned with the ethical rules or possible consequences of the deeds; it simply claims that what matters most morally is the quality of the character of moral actors. If we are dealing with good people, we have the guarantee that we will see right deeds that produce good in the world and thus prevent or minimise harm*" (ed. Moodley, 2011, p.30)

Axtell and Olsen also strongly argue for virtue ethics in the field of applied ethics based on the "*centrality of the role of character traits (virtues)*" (2012, 183). Axtell and Olsen, like Pellegrino and many others, see virtue ethics as highly applicable to the profession of medicine. The article also emphasises that virtuous traits can be strengthened and learned, and one can continually improve. They conclude by arguing for a balance between the individual virtuous agent and the social virtue aspirations of greater public virtue, and greater *eudaimonia*, also known as "well-being" (Axtell and Olsen, 2012, p.198).

Hursthouse extensively explores this theory in relation to abortion (1991). She basically asks the question, "What sort of people should we be?" as the basis for her argument. The premises she builds from are summarised as: "*An action is right if it is what a virtuous agent would do in the circumstances. A virtuous agent is one who acts virtuously, that is, one who has and exercises the virtues.*" (Hursthouse, 1991, p.225). What is virtuous is a topic, which Hursthouse and numerous others have attempted to address, and which unfortunately lies beyond the depth of exploration for this thesis.

Matejić and Otasević also focus on virtuous characteristics of a higher morality that the forensic doctor requires (2010). Their article specifically mentions ethical conduct, which remains relevant in South Africa too. I quote: "*that forensic experts have both the necessary personal characteristics (strong character, high level of morality, ethics, courage) and medical knowledge, an understanding of the basic principles of acting as a forensic expert and legal concepts, as well as the ability to express themselves in a clear and understandable way.*" (2010, p.774) Another characteristic, in line with deontology, emphasised by many authors is truthfulness (Taborda and Arboleda-Flórez, 1999, p.196; HPCSA Booklet 1, 2008, p.2; Matejić and Otasević, 2010, p.775). "*We owe respect to the living; to the dead we owe only the truth*" – Voltaire, as quoted by authors Wildfire, Stebbing and Gazzard (2007, p.473).

An important aspect of virtue ethics is related to the concept of phronesis. Phronesis can be translated as prudence or practical wisdom, and this is regarded by some to be an important virtuous trait worth discussion (Bernstein, 1982; Kaldjian, 2010; Moss, 2011; Nyberg, 2008; Siegler, 2000; Van Niekerk and Nortjè, 2013). This idea of phronesis is based on Aristotle's *Nicomachean Ethics*.

Moss captured the difference between virtue and phronesis in the following statement: "*Virtue makes us aim at the fine; phronesis determines what is finest.*" (2011, p.259). Moss examines Aristotle's interrelation between virtue and phronesis (2011). She writes that virtue's aim is "*as one should*", while phronesis "*determines that mean*" (2011, p.244). Moss's statement is like Nyberg's assertion of "*doing the right thing, in the right way, and at the right time.*" (2008, p.590) In other

words, knowing what the right thing is to do and then doing it. The importance of moral understanding to be not only theoretical but also practical is essential to the Ethics of Responsibility framework as proposed by Van Niekerk and Nortjè (2013). They state: “*It is the knowledge that enables us to act in many practical situations encountered in everyday life.*” (2013, p.30). It is about applying what we know to be good and true and virtuous. This was essential to Bernstein as well (1982).

In summary, phronesis spurs the individual on to enhance their moral sensitivity by critically evaluating their actions, and even codes of conduct and rules and laws. “*Phronesis is about questioning the “right” way of doing things to make sure the “good” way of doing things is performed.*” (Nyberg, 2008, p.597). Acting as a virtuous agent and applying phronesis aids in the moral decision-making process, especially in the medicine context (Siegler, 2000; Van Niekerk and Nortjè, 2013).

Strengths of virtue ethics:

One of the greatest advantages of virtue ethics is that it relates to the deepest aspects of being human. It also acknowledges special relationships, such as familial care. Once the character of the actor being assessed is consistently virtuous, the advantages of virtue ethics is clear.

When considering that a virtuous agent can enhance their virtuous traits to be more virtuous, this can be regarded as a strength too. This theory has the possibility of enhancement as the virtuous goal can be set higher. It allows for growth, as a person matures and grows as a virtuous moral agent. When incorporating phronesis as a virtuous trait, i.e. applied wisdom and prudence, the opportunity and advantage long term to continue to grow in wisdom is evident. This aspect of virtue ethics also leans towards the possibility of tackling each ethical dilemma at hand as a separate entity to which phronesis can be applied. It does not regard complacency as a virtue, and by striving for better enables this theory to be able to assess actions and outcomes critically and continually and adjust the virtuous goal higher.

Weaknesses of virtue ethics:

Virtue ethics can be problematic where public interest is concerned; for example, in public policies. Uncertainty can also exist over how one ought to act in a specific situation if specific “rules” are not followed, as one cannot accurately predict if one would really act virtuously in a problematic situation. One can trust that character alone would be enough in a critical situation, but even the bravest have failed in the face of inconceivable problems. As humans, we are flawed; none of us always regard others above ourselves.

The fact that different virtues are important to different people can be seen as a weakness of this theory as well. Even the concept of a virtuous moral agent acting justly can be seen to have contrasting outcomes, based on who the agent is. This was well illustrated by Sandel: “*Finally, we turn to theories that see justice as bound up with virtue and the good life. In contemporary politics, virtue theories are often identified with cultural conservatives and the religious right. The idea of legislating morality is anathema to many citizens of liberal societies, as it risks lapsing into intolerance and coercion. But the notion that a just society affirms certain virtues and conceptions of the good life has inspired political movements and arguments across the ideological spectrum. Not only the Taliban, but also abolitionists and Martin Luther King, Jr., have drawn their visions of justice from moral and religious ideals*” (Sandel, 2009, p.16).

I am reminded of a comment made by Jones and McCullough: “*...in the dark side of human nature, is a historical invitation to cross moral boundaries by weak-minded individuals and nations alike,*

casting at times, doubt upon the fundamental goodness of human nature." (2011, p.880). Their article is entitled: *Ethics of rehearsing procedures on a corpse*, in which they argue that this practice not only disregards the obligations to patient's families but is also "*disrespectful of dead patients and therefore not benign in the context of professional formation*" (2011, p.880), showing that self-interests related to learning new skills, for example, were more important than first seeking consent and authorisation.

The following quotation by Van Niekerk and Nortjè aptly emphasises the disparity sometimes seen in the moral agent: "*we have no assurance of correct moral behaviour*" (2013, p.29). Although this relates to their alternative approach to bioethics, namely the Ethics of Responsibility, this also illustrates that virtuous moral behaviour is not a given. Obviously, they aim for a moral agent to act responsibly as a standard.

Consideration in forensic medicine:

The virtuous forensic practitioner is important. This can be useful in expert testimony cases in court where an unbiased, honest opinion is given instead of the opinion the paying party might want; a virtuous pathologist will not be bribed or fail under unethical dual loyalty situations (Carol *et al.*, 1991, p.164; Matejić and Otasević, 2010, p.775).

Countless historical examples make it clear that virtuous people can fail under pressure or in situations of dual loyalty. Ironically, one of the earliest ethical guidelines on research in participants was formulated in Germany in 1930 (Taborda and Arboleda-Florèz, 1999, pp.191-192), yet this did not deter the atrocities among physicians under the Nazi regime in relation to experimentation during the Second World War.

Another concern of this theory in forensic medicine is related to the emphasis on personal integrity. This can, of course, be difficult to always uphold. To illustrate the potential for dual loyalty conflicts, imagine that you are a forensic pathologist whose own child has been accused of murder. If you are the only pathologist in a specific area (as is the case in many understaffed provinces in our country), there would surely be conflicting interests; firstly, towards your child, and secondly, the duty towards the state. Another example can be if your colleague is referred a case with familial connections to yourself. This too can indeed influence him or her.

The application of phronesis to the forensic medicine context is also important. As I mentioned above, merely following codes, rules and laws does not equate to morality. This is where phronesis is important: "*Practical wisdom also depends on other moral virtues and general moral principles to ground the process of deliberation within a larger moral framework.*" (Kaldjian, 2010, p.559).

4.4 Rights-based theory

No theories related to justice are easy. As was aptly said by Sandel, to "*assess these theories of justice, it's worth asking how philosophical arguments can proceed – especially in so contested a domain as moral and political philosophy*" (2009, p.16). Even though this thesis is not a discussion about the different theories of justice, it is worth pointing out Sandel's conclusion that it is not as simple as saying older cultures relied on virtue to influence justice theories, while modern theories, such as the rights-based theory I briefly mention here, is based on individual freedom of choice. "*The conviction that justice involves virtue as well as choice runs deep. Thinking about justice seems inescapably to engage us in thinking about the best way to live.*" (Sandel, 2009, pp.11-12).

Considering Hursthouse's approach, the rights-based theory is a theory of conduct (1991). This theory is a derivative of deontology, with a focus on the interplay between judicial law and

individual rights. This theory would ask “What sort of action should one take based on one’s individual rights?”, which would then determine one’s conduct.

Human rights are at the forefront of western societies. Our own country has come a long way regarding human rights. We need only consider the contrast between the gross disregard for human rights under the inequality of apartheid, and the more recent Bill of Rights and Truth and Reconciliation Commission. A right can be defined as a claim that society or an individual can invoke against another individual or larger group. When one has a right to something, one then has a standing or claim that society, or any other individual, is obligated to act towards you in a particular way, depending on the sphere you are in (Beauchamp and Childress, 2013, p.368).

Beauchamp and Childress highlight that rights can only assert *prima facie* claims; in other words, rights cannot all be absolute (2013, p.369). When an individual’s right jeopardises or conflicts with other’s rights and/or safety, that claim can be overridden for the benefit of public or individual interest, such as in certain cases of multi drug resistant (MDR) TB and especially extensively drug resistant (XDR) TB cases.

Authors Wildfire, Stebbing and Gazzard used the rights-based theory in their article *Rights theory in a specific healthcare context: ‘Speaking ill of the dead’* (2007). In this article, the authors looked at all the different parties involved in the application of this theory to the forensic context, including the patient, family, physician, and societal rights. The outcome was that individuals may have rights during life, but these may or may not apply after death, depending on the situation. “*After death the patient has no capacity to suffer and has relinquished some rights*” (Wildfire et al., 2007). Baglow also explores the rights of the deceased in his article: *The Rights of the Corpse* (2007). He explored the difficult concept of boundaries between the living embodied self and that of the deceased. His conclusion was that the deceased had value based on both their human attributes and the social relations and resulted in rights met in the form of duties or obligations. These obligations towards the dead were also focused on in the form of promise-keeping by Brecher (2002).

Strengths of rights theory:

Rights, as in duties with deontology, can be universally applicable, the advantage being standardisation. This helps especially in countries where previous human rights abuses flourished by giving equal standing to all parties involved. It should take away the bias and help individuals to act consistently. The consequences of not abiding by legally acknowledged rights serve to protect the vulnerable.

Weaknesses of rights theory:

As with Kantianism, one weakness is that the motives of the one enforcing the rights cannot be morally accounted for (Beauchamp and Childress, 2013, p.374). Rights based theory is also more individually focused, at the expense of the communal good. This is important to mention in culturally diverse South Africa, as this places limits on some rights. Many population groups in Africa attach significant value to the community and culture, than individual rights. This concept will be explored more in the next theory of communitarianism below. The other problem is whether a right can be enforced in a country like South Africa where resources are limited. A case that comes to mind is that of Soobramoney against the Department of Health; Soobramoney claimed his right to renal dialysis based on his right to life and right to emergency medical treatment (ed. Moodley, 2011, p104). In the end, his appeal was overruled due to resource limitations.

Consideration in forensic medicine:

This theory can work very well in the forensic environment. I addressed the matter of ascertaining rights to the deceased in the previous chapter where I established that the deceased has moral standing. Obviously, a dead person cannot have all rights, such as the right to the freedom of speech or to emergency care. I will however allude to certain rights that are very applicable, even towards the deceased, in my sixth chapter, Justice Part 2: An exploration of the Rights-based justice in the Forensic Medicine context. In the realm of politics and law, rights-based theory is regarded as a good framework to address moral dilemmas.

Problems within rights-based theory in relation to forensic medicine are like those posed by duty. In the same way that a conflict can arise between a duty to confidentiality and a duty of truth telling, one can say there exists both a right to confidentiality and a right to tell the truth. Wildfire *et al.*'s earlier example of the deceased's HIV status is again applicable here (2007).

4.5 Communitarianism

Another theory which is crucial to consider within the African context is the African theory of communitarianism, also known as the philosophy of *Ubuntu*. *Ubuntu* is often translated or quoted as "*people are people through other people*". Within this theory, the community's interest is regarded as much more important than the individual's rights. Family becomes important in the 'training' of the individual to be a valuable member of the community with moral value (ed. Moodley, 2011, pp.35-36). This community centred approach to ethics can be very appropriate in our African context. As we know, family and the different cultural traditions still play a pivotal role in many South Africans lives.

Again, using the conduct or character approach of Hursthouse, communitarianism may also fall under the conduct approach and explores the question of what action should an individual take in relation to the community's expectations, norms, and values. In other words what kind of person makes a 'good' community member. The question may be: "What action will be regarded by my community as the best action?". Because of South Africa's cultural context, communitarianism is an important consideration here, as was illustrated in the discussion in chapter 2 concerning the cultural significance of the deceased.

Strengths of communitarianism:

An individual forms part of greater community, which can enhance the feeling of unity. If the cultural norms are morally comparable with virtuous norms, this in turn can help encourage virtuous characteristics in individuals from a young age. The vulnerable in such a community are many times incorporated within the greater whole. This in turn helps to discourage unethical practices towards these individuals. It can have utilitarian overtones as well, where the majority benefit.

Weaknesses of communitarianism:

Confidentiality as an individual may also be difficult, as the community may 'want to know' or be involved in many matters that otherwise could be regarded as private. This in turn may complicate the consenting process. Further, the benefit to the majority may not always align with an individual's morals Organ donation may be an example. A certain community may feel very strongly about not donating organs, whereas a single individual may want to donate his/her organs but out of fear of ridicule from the community decide against it.

Rigaud *et al.* recognised in their article about improving the accuracy of the cause of death determination by post mortem sampling, that there is an existing tension between the interests of the dead individual and the community and society at large (2012, p.132).

Consideration in forensic medicine:

The application of this theory to forensic medicine may be difficult as law governs the field. The communitarian theory could aid in understanding certain deaths within a community that may otherwise remain a mystery. This was the case with the Hantavirus (Sin Nombre virus) in 1993 and 1994. The Navajo nation's medicine people accurately related the causes of these deaths to animals as per traditional views (Stumpff, 2010, p.3). The scientists could have benefited if they took time to hear from the local community their thoughts and ideas, aiding in faster detection of the source.

Some religious communities act in a communitarian way. An example where this can hinder forensic medicine is in certain orthodox Jewish communities. The concept of the body needing to be "intact" at burial can hinder a proper forensic autopsy. If a person was involved in a car accident and the pathologist wished to keep the brain to dissect it with a specialist neuropathologist at a later stage, this could be regarded as desecration of the dead (Rosner, 1971, pp.48, 53).

4.6 Casuistry

This biomedical theory is different from the other ethical theories as it starts at the end, with the facts of the case, and then evaluates what the theory/reasoning behind the case is. Every case faced in casuistry is compared with other similar cases and insights gained from them, before considering the ethical issues entailed in the specific case under scrutiny.

The case at hand must be thoroughly laid out with all the possible decisional problems the case might yield. Possible questions are: what are the patient's wishes, what is the doctor's scope of expertise, who are the role players involved, and what will the cost be? This case must then be compared to others for similarities and differences. Finally, a decision can be made.

In the variabilities surrounding medicine this is a valuable framework to consider. The flexibility of this theory makes it a feasible option in forensics as well, since each forensic case is unique. Arras addressed casuistry ethics in his discussion titled *Theories and Bioethics*, where he addresses this ethics as an '*anti-theory*' which is not ordered and is a '*bottom-up*' approach (2010, p.8). This may seem a weakness at first glance, but with probing this is a strength. The reason is that this framework is applicable at ground level. The lack of well organised systems and ways of thinking enhances the specificity of the approach. It can be more culturally relevant than other frameworks proposed thus far. As Arras states: "*anti-theorists emphasize the cultural embeddedness, particularities, and ineradicable untidiness of our moral lives*" (2010, p.9). It can be applicable to anyone, not just academics or the well-educated.

Sandel describes a process of reflection that sounds similar to casuistry: "*Confronted with this tension, we may revise our judgment about the right thing to do, or rethink the principle we initially espoused. As we encounter new situations, we move back and forth between our judgments and our principles, revising each in light of the other. This turning of mind, from the world of action to the realm of reasons and back again, is what moral reflection consists in.*" (2009, p.20).

Strengths of casuistry:

The theory emphasises the importance of case complexities. The circumstances surrounding each case cannot all be pressed into a specific moral framework and be expected to have a clear-cut outcome.

As mentioned in the discussion above, one of the great strengths of this approach is related to its general applicability. It has a wide base of influence in a culturally and religiously diverse nation such as South Africa. “*Bioethical casuists contend that their method of moral reasoning...offers us better chances of reaching agreement with people of very different religious or theoretical persuasions*” (Arras, 2010, p.9)

Weaknesses of casuistry:

This approach can be very time consuming. Each case remains different with unique challenges; no two cases can be the same and thus it might not be easy to compare them to others. Another challenge can be that different societies and communities attach different significance to moral values and have different ways of approaching ethical cases. The way a case is ‘solved’ in an African, community-orientated setting will be different from that of a western, more individualistic-orientated paradigm, which again can be different from cases done in a predominantly Jewish state.

Consideration in forensic medicine:

This theory’s application in the forensic medicine arena can be helpful as all forensic cases should be approached as individual cases. No two are the same, or have similar circumstances, although comparison across broad groups can be easily sought. Some of the ethical issues in forensic medicine are difficult to approach on a case by case basis. An example of this is with expert testimony in court. Here more general guidelines applicable to all cases should be in place. So, although individual cases could benefit from this theory, there are general ethical issues which also need to be addressed.

Given the strength of the approach for general applicability, it also has relevance to “*common law jurisprudence in which the factual particularities of the case take center stage*” (Arras, 2010, p.9). Many laws have been developed based on specific cases. I will refer to this again in chapter 5 when I discuss South African law in general as well as the laws related specifically to forensic medicine.

4.7 Principlism

Principlism refers to the theory based on the four principles of biomedical ethics developed and refined by Beauchamp and Childress. This approach to ethical dilemmas has been widely accepted, especially in the field of medicine. The four *prima facie* ethical principles are respect for autonomy, non-maleficence, beneficence, and justice. The word principle is derived from the Latin word *principia* which literally means “*at the beginning*”. Each of the principles is an action guideline (ed. Moodley, 2011, p.37).

According to Beauchamp and Childress most of the moral theories accept the principles of “common morality” principlism outlines. Most of the theories give insight into the general idea of the four principles and only trivial differences exist. This “*convergence on general principles is common in moral theory*” (Beauchamp and Childress, 2013, pp.383, 384). Each of us operates within a

framework of certain moral beliefs that is referred to as the “common morality” and are expressed within the four principles.

As principlism looks at your actions in relation to the four principles derived from the concept of common morality, this approach may possibly also be considered under the ethics of conduct, as per Hursthouse (1991). Using this understanding, the action we take is determined after a balancing and consideration of the principles. The question to consider may then be: “When balancing the four principles, what action is the best to take?”

In utilising this ethical approach, all the principles are weighed against each other. The concept of “*reflective equilibrium*” (Beauchamp and Childress, 2013, pp.404, 405) as per the social contract theory of Rawls (which I have not addressed specifically in this assessment of theories), is used. The idea behind reflective equilibrium is that, in weighing the four principles respectively, an equilibrium is reached as a possible solution, as the problem solving must be a process and not a finished product (ed. Moodley, 2011, p.39).

Despite much criticism of the four proposed principles (which have been ably defended by Beauchamp and Childress), they have nonetheless been widely accepted in the biomedical sphere. These principles have served as a framework to address concepts in biomedical ethics. Beauchamp and Childress summarise them as follows (2013, p.13):

- 1) *Respect for autonomy (a norm of respecting and supporting autonomous decisions)*
- 2) *Non-maleficence (a norm of avoiding the causation of harm)*
- 3) *Beneficence (a group of norms pertaining to relieving, lessening, or preventing harm and providing benefits and balancing benefits against risks and costs)*
- 4) *Justice (a group of norms for fairly distributing benefits, risks, and costs)*

Strengths of principlism:

One of the strengths of principlism is also considered an obstacle by some critics, as all the four principles are given equal status and no single one can be regarded as the main principle. This said, these principles do make this theory widely applicable to a diverse biomedical field. However, where there are conflicting outcomes amongst some of the principles, it is not always apparent which is the best way to proceed

Weaknesses of principlism:

This approach may be widely acknowledged in the biomedical arena, but many objections have also been brought against this framework. The methodology of the approach is questioned, with some arguing that the theory is a mere “checklist” of things to be considered rather than a sound moral guide.

The conflicting principles in different ethical situations may be more of a hindrance than a help (Arras, 2010). This was also one of the main critiques against principlism from Clouser and Gert (1990). In their article, *A critique of principlism*, they express concern that Beauchamp and Childress have replaced moral theory and ideals with principles that are misleading on both a theoretical and a practical level (1990). They argue strongly that the principles lack substance and are not connected in any way, or able to solve ethical dilemmas due to their conflicting nature (Clouser and Gert, 1990). It is a well written critique that is still applicable to principlism, although

the wide acceptability and application of principlism to the medical field has shown that it is indeed practicable.

Consideration in forensic medicine:

Considering academic, let alone philosophical writings, on theories implementing principlism to forensic medicine is scarce. Dada and McQuoid-Mason (2006) briefly explored ethical matters pertaining to the forensic medicine field and used the principlist approach. They alluded to some of the ethical issues of the apartheid regime which I also mentioned in the introductory chapter, such as falsifying death certificates as dictated by government officials. They concluded that using these four principles will help forensic doctors in *“complying with the provisions of the Constitution and the ethical codes of the profession. It will also enable them to overcome the dilemmas of dual loyalty and to carry out their duty to court.”* (2006, p. 140). This article was relevant to forensic pathology, but also incorporated clinical forensic medicine spheres, such as prison care.

The myriad of people involved in the forensic discipline add to the complexity; family, other medical colleagues that were involved in care when the deceased was still alive, police, courts and a whole host of other relationships come into the equation. This was also mentioned to a degree in the older article by Baron (1993), previously alluded to under virtue ethics as theory. Baron explores the principlist approach in relation to the field of clinical pathology. Although there are differences between anatomical pathology and forensics, some of the ethical issues are still relevant. These include confidentiality, accurate and honest reporting, collaboration between the pathologist and other clinicians, storing of tissue specimens and resource limitations (Baron, 1993, pp.385-387).

Principlism was again applied by author, McQuoid-Mason (2012), in his approach to better understand the limits of the patient’s autonomy. McQuoid-Mason used the death of Michael Jackson due to negligent use of an anaesthetic drug to illustrate his argument. Although this is a South African author and article, it addresses the general ethical issue of autonomy related to the principlism theory. The key issue is whether autonomy relates solely to the ante mortem decisions of Jackson or also to his retained post mortem interests I will refer to autonomy and the deceased in chapter 9, where I again pick up discussion of Jackson’s case

The four principles, as per Beauchamp and Childress, were also used in the articles by Baron (1993), Benbow (1993) and Arcus and Kessel (2002).

4.8 Conclusion and argument for principlism

The problem of finding a framework to analyse ethical concerns in forensic medicine is not easy. There is much controversy at times in the philosophical domain about the appropriateness of philosophy and its so-called higher “philosophical” theories versus the mid-level theories (Arras, 2010) (Saad, 2017). This is exactly what author Arras explores as he critically examines the place of philosophical theories in bioethics (2010). The high-level theories are argued to be utilitarianism, deontology, rights-based theories, and the like, in contrast with mid-level theories such as principlism and anti-theories such as casuistry, feminism, and narrative ethics. The problem with many of the higher theories is that they are mostly theoretical, never in agreement with each other, and not as easy to apply to real life situations as required by bioethics. *“The often yawning gap between our shining ideal theories and tawdry social realities engenders serious problems when we try to envision how we might get from where we are now, mired in all sorts of injustice, to Paradise Island.”* (Arras, 2010). Therefore, principlism has had such an influence in the field of medicine.

The article by Ssebunnya was contributory to my decision in choosing principlism as a guiding framework (2015). The author argued for a trifocal perspective in moral deliberation in medicine. This approach is where “*the virtuous moral agency and teleologically derived moral imperative of the physician are comprehensively integrated with an action-guiding practical analytical framework for the resolution of ethical dilemmas in the practice of medicine.*” (Ssebunnya, 2011, p.22). The framework he used as an example for his trifocal perspective is principlism within the integration of the doctor as moral agent. This was confirmatory to this thesis as well. Although I do not focus extensively on the forensic doctor as moral agent, this is implied throughout the thesis. The underlying call for the forensic doctor to act as a virtuous moral agent towards the deceased, who possesses moral standing as a moral patient, is important. Ssebunnya also echoed my belief that the pursuit for “*moral education is vital*” (2015, p.15).

Arguing for principlism as the framework of choice for deliberation is not easy. “*While different theoretical accounts could be applied similarly to a certain subject there are also reasons, why one theory might be a better fit than another.*” (Salloch *et al.*, 2015, p.3). This is what I had to keep in mind with the selection of a framework for the forensic medicine context. One of the main reasons why I have chosen principlism was the approach’s existing footprint in the biomedical field. It was not primarily theoretical, like some of the original philosophical theories. Many of the ‘true’ theories of philosophy are not easy to apply to the diverse and practical field of medicine. It cannot merely be a theory based on abstract theoretical examples but had to be highly applicable to a variety of real cases. Principlism has stood the test of scrutiny in medicine at least, although philosophically still controversial as discussed, such as that it may be too broad, negating it as a true theory. Opposing principles do not make the decision-making process easier, but at least it considers the dilemma from different angles.

Salloch *et al.* have proposed steps that can be taken in the selection of an ethical theory which I find applicable here too (2015). The authors identified three criteria to apply to a chosen theory that will help aid in selecting which theory to use. These basically entail “*the adequacy of the ethical theory for the issue at stake, the suitability of the theory for the purposes and design of the empirical-ethical research project and the interrelation between the ethical theory selected, and the theoretical backgrounds of the socio empirical research*” (Salloch *et al.*, 2015, p.2). The first two are especially helpful in the argument for the principlism approach as a framework to use in forensics. Even though this is not a theory for research related endeavours, I still think it could possibly guide future ethical research in this field as well.

The first criterium Salloch *et al.* proposed was related to how adequate the framework is to the subject of discussion at hand (2015, pp.4-6). The authors used the miss-matched example of utilitarianism for solving dilemma’s around relational aspects at the end of life (Salloch *et al.*, 2015, p.5). In other words, does the principlism approach fit well with answering ethical questions that arise in the forensic medicine field? Due to the four principles of principlism, this approach has the advantage of being adequate for a variety of dilemmas, ranging from justice concerns (intricately important in forensics) to post mortem harm concerns of the surviving family, which can be discussed under the principle of non-maleficence.

The second criterium I will briefly note is related to the aptness of the framework for the goal of the project at hand (Salloch 2015, pp.67). The aim and purpose of the thesis is therefore important. This is defined in my two questions that started this thesis. The second question is applicable to this second criterium of Salloch *et al.*; namely, how ethical issues in forensic medicine can be identified and explored. One of my main goals is identifying a framework to evaluate ethical issues in forensic medicine. The question is, therefore, whether principlism is suitable to evaluate and discuss ethical issues in forensic medicine. I argue here that it is. Salloch *et al.* state in a very

simplified way that applicability can be defined as “*something is applied to something to some end*” (2015, p.6). The first “something” is principlism, the second “something” is forensic medicine, and “some end” is to identify and solve ethical dilemmas. Thus, principlism is applied to forensic medicine to identify and explore ethical issues. Therefore, this chosen framework can be applicable.

Salloch *et al.* conducted empirical-ethical research related to advanced cancer and discussed the process of theory selection based on the research (2015). The interesting conclusion for me was that, though they discussed the importance of selection of a correct theory, they utilised several theories in the end to achieve their goal. They utilised different theories at different stages of the research as they felt it “*became necessary due to the comprehensive structure of the overall project*” (Salloch *et al.*, 2015, p.7). This is another argument in favour of utilising principlism, with its broader scope, given the enormity of my aim too. Instead of using several theories I chose to use one with a wider base to fit with the wider range of dilemmas that the forensic doctor as moral agent is confronted with.

Despite Beauchamp and Childress having endured much critique of their principlist approach in bioethics since its inception in the 1970s in North America, the far-reaching applicability, to a vast range of ethical dilemmas in medicine, locally and internationally, has proven that it is an approach I can utilise for this thesis too. The normative values also aid in its applicability as “*associated a sense of oughtness or shouldness*” (Walker and Lovat, 2016, p.153). Tsai has argued for the universality of principlism in bioethics in the Eastern-cross cultural context (1999), as has Gillon for Europe (1994). Recently, Saad also acknowledged the “*broad influence*” principlism has had (2017). Principlism has been used for almost four decades now. The action guiding nature of these four principles makes this approach practical for solving ethical dilemmas (Walker and Lovat, 2016, p.153).

Tsai extrapolates the principles of beneficence and non-maleficence as essential and applicable when compared with the ancient Chinese medical ethics of Confucian humaneness (*jen*) (1999, p.320). He also compared the Eastern way of equal treatment (*yi*) to the principle of justice. A good doctor-patient relationship should not be sacrificed to the Western over-emphasis on autonomy (Tsai, 1999, p.321).

Like Tsai (1999), Gillon also found that the four principles, plus attention to scope, was a highly applicable model to use in medical ethics since it is encompassing (1994, p.184). Gillon states that it “*enables health care workers from totally disparate moral cultures to share a fairly basic, common moral commitment, common moral language, and common analytical framework...which is neutral between competing religious, political, cultural, and philosophical theories*” (1994, p.188).

As mentioned at the onset of this chapter, I have chosen to utilise this mid-level theory in approaching forensic ethical issues. Balancing the four principles is not always easy. But it is in the process of using the framework that the importance lies. “*How theory can be connected to practice is a problem of greater urgency today than it was...when philosophers were not in touch with medical morality*” (Beauchamp, 2004, p.216). These four principles will be my starting point as I evaluate their applicability to forensic medicine.

Each of the four principles will be applied to forensic medicine in more detail in forthcoming chapters. The first principle of justice is very applicable to forensics as this field is so closely knit to legislation. The fair distribution of resources is also an important aspect. In order for the laws governing forensics to be well implemented the resources need to fulfil the minimum requirements needs to be in place. These include many aspects related to the medico-legal laboratories and

optimum functioning to reach the goal set out by law. This means that the applicable cases need to be appropriately referred. These cases need to be well investigated to determine the cause of death, time of death and identification of the deceased. This in a nut shell is the application to the justice principle to forensic medicine.

The principles of beneficence and non-maleficence are both closely linked to harm. Beneficence, or doing good, can be applied in the forensic context to the deceased by upholding the bodily integrity as far as possible. This can range from the way the organs are eviscerated to the retention of organs. In treating the deceased's body with respect and dignity the possible post mortem harm experienced can be minimised as far as possible. Applying the principle of non-maleficence in the forensic context can be to avoid dual loyalty situations that can cause harm. The way research is structured can also decrease harm if the advanced directive is considered for example.

Autonomy and forensic medicine does not seem to go hand in hand. This is not an easy principle to apply to forensics. In the 9th chapter I will explore the deceased's ante mortem consent concerns, such as for organ donation. I will also explore how applicable confidentiality still is for the deceased.

As the next chapters unfold these principles will be put to the test, so to speak, to see if this theory can work as a framework. In my conclusion I will comment on the suitability of extrapolating these four principles to forensic medicine ethical issues in general. Ethical issues in this field are not unique to South Africa, as some of the articles I have used will illustrate.

I end this chapter with a final comment made by Sandel in his discourse, *Justice: What's the right thing to do?* (2009). This quotation is worth extrapolating to the moral discussion I am attempting to address in forensics by utilising principlism as my chosen framework: "*There is no guarantee that public deliberation about hard moral questions will lead in any given situation to agreement – or even to appreciation for the moral and religious views of others. It's always possible that learning more about a moral or religious doctrine will lead us to like it less. But we cannot know until we try.*" (Sandel, 2009, pp.138-139).

Chapter 5: Justice – Part 1

A brief exploration of South African legal justice and forensic medicine

5.1 The law and ethics

5.1.1 An introduction to justice:

The concept of justice has been written and philosophised about for centuries. One of the great Greek philosophers of ancient times, Aristotle, was attributed as saying in his *Nichomachean ethics*: “*Equals must be treated equally, and unequals must be treated unequally*” (quoted in Beauchamp and Childress, 2013, p.250). However controversial this statement may be to some, it does indicate that the concept of justice has been deliberated about for more than two millennia already. The Egyptians, also one of the oldest civilized cultures, were believed to have recorded codes by which society was expected to live. Probably the most well-known earliest translated writings on law is the Code of Hammurabi, written by the Babylonian King Hammurabi during his reign (1792–1750 B.C.). According to the Encyclopaedia of Britannica (n.d.), these two hundred and eighty-two case laws were simple laws related to commercial, familial, criminal, and civil matters. This ancient code gives us a glimpse into the sophisticated justice system that was already established at the earliest of times, and emphasises that people in general, regardless of time, culture, or geographical setting, have always been attracted to the concept of justice.

The next three chapters explore the principle of justice in relation to forensic medicine. Prior to this, I need to establish my general understanding of justice. According to the Oxford Dictionary (n.d.) the “justice” is synonymous with terms such as fairness, equity, impartiality, lack of bias, egalitarianism, and lack of prejudice, to mention but a few. Many authors agree with the term fairness as an apt one-word description of the term justice. (Beauchamp and Childress, 2013, p.250; Dada and McQuoid-Mason, p.37; ed. Moodley, p.73). The concept of justice as related to the belief that all humans should be treated equally or fairly is summarised by Beauchamp and Childress as “*fair, equitable, and appropriate treatment in light of what is due or owed to persons*” (2013, p.250). To agree upon fairness is one thing, but to establish what fairness is, is the real question.

“*What is fair to whom?*” is the question with which Clayton and Opatow wrestle (2003, p.307). They argue that fairness is determined to a large degree on the identities of those making justice-related decisions; “*the importance of understanding people’s perceptions of what is fair*” cannot be ignored (Clayton and Opatow, 2003, p.308). They go on to state that most models and theories exploring justice give examples that are generally removed from the reality of everyday human life. The models people choose are indeed reflective of their personal identities and cannot be devoid of emotion. Obviously, there will be differing opinions depending on how significant a certain area of justice is to someone. While a free trade economy is fair to some, another might argue against it if it involves capitalising on the vulnerable. “*A universal, abstract justice aspires to rigid principles that cannot fully capture the complexity with which identity intersects with justice.*” (Clayton and Opatow, 2003, p.307).

Michael Sandel’s excellent “*Justice: What’s the right thing to do?*” (2009) raises questions pertaining to how people should be treated so that justice is upheld. “*They are also about what the law should be, and about how society should be organized. They are questions about justice. To answer them, we have to explore the meaning of justice...[T]he arguments...revolve around three ideas: maximizing welfare, respecting freedom, and promoting virtue. Each of these ideas points to a different way of thinking about justice*” (Sandel, 2009, p.10). Sandel also mentions that justice

involves two further important aspects to consider. The first aspect he writes involves virtue – as an exploration of the good way to live. The second aspect is around the freedom to choose (Sandel, 2009, p.10).

5.1.2 Difference between law and ethics:

Laws and ethics

It is important at this point to briefly mention the difference between law and ethics. The basic understanding of a law is that it is a legal norm. These legal norms are put in place by a governing authority, such as the state of a country. The law must then be applied to everyone in that state. If a law is not adhered to, it carries punishable consequences. One example is adherence to a speed limit whilst driving on a public road. If someone drives above the recommended speed limit of a specific road, a fine or other appropriate sentencing / punishment is then applicable for breaking this law.

The following quotation from Kelly *et al.* from the British Medical Association articulates the dilemma between law and ethics well: *“It is important to remember that a doctor’s legal obligations are much less than his moral obligations. The legal minimum is not necessarily ethical.”* (Kelly *et al.*, 1996, p.1572). Laws are not always ethical. This was clearly illustrated by many laws in the apartheid era of South Africa, in force from 1948 to 1994. The Prohibition of Mixed Marriages Act (Act No 55 of 1949) was a law that prohibited inter-racial marriages, and even sexual relationships, in South Africa between white people and three other identified race groups (SA History, n.d.). Why can this law be seen as unethical? It discriminates between races and does not regard all races as equal. Equality and fairness are very important in ethics as norms that are considered ‘right’ in terms of human conduct. Most of the nation did not regard this law as morally right in relation to restricting human sexual and marriage conduct. This is also one of the many laws that was repealed in the post-apartheid era and is no longer part of the current legal system. There are many other examples of apartheid-era laws, widely viewed as unethical by the international community. It is apparent that this specific law was unethical.

Sandel (2009) gives another angle to the ethics and law debate when he writes about the difficulty in assessing the original moral judgement namely, who gets to be the ultimate judge of what is right or wrong? In his exploration of what he calls the virtue argument, he asks multiple questions in connection with the judgement made that greed is not a virtuous action and ought to be discouraged by the governing authority or state: *“But who is to judge what is virtue and what is vice? Don’t citizens of pluralist societies disagree about such things? And isn’t it dangerous to impose judgments about virtue through law? In the face of these worries, many people hold that government should be neutral on matters of virtue and vice; it should not try to cultivate good attitudes or discourage bad ones... This dilemma points to one of the great questions of political philosophy: Does a just society seek to promote the virtue of its citizens? Or should law be neutral toward competing conceptions of virtue, so that citizens can be free to choose for themselves the best way to live?”* (Sandel, 2009, p.11)

It is quite apparent that the discussion surrounding law and ethics is much more complex than I may even begin to grapple with in this thesis. Much has been written about political philosophy and this thesis is not the place to thoroughly unpack these different ideas, some of which Sandel did well in his discourse. Since ancient times, the political environment and laws have functioned and been built in conjunction with common morality principles. I have previously mentioned the example of not to kill as one of these common moral ideas that most people accept as true. This has subsequently been taken up into most law systems. The outcome for civil societies is that

murder is a punishable offense. This was already noted in the Code of Hammurabi written by the Babylonian King Hammurabi (1792–1750 B.C.).

A good summary of the differences between laws, ethics and morality was presented in an article by Taborda and Arboleda-Flòrez: *“In summary, then, ethics establishes principles, general normative patterns of behavior that allow the criticism of human conduct. Morality establishes norms that are freely accepted so that, when transgressed, uneasiness and social criticism will result. Law establishes regulations that are imposed and that carry state sanctions when not complied with.”* (1999, p.190).

Laws and paternalism

There has been an important shift within medicine in the last century regarding bioethics. The mindset of medicine has been moving away from a predominantly paternalistic approach. This approach implied that the patient was not the one making their own decisions related to their health, but the physician was the primary decision maker. Even though Beauchamp and Childress address paternalism under the beneficence principle (2013, p.215), I mention it here because I do think that laws, in the general sense, can be seen as paternalistic. Paternalism, according to the online Oxford Learner’s Dictionaries, is *“the system in which a government or an employer protects the people who are governed or employed by providing them with what they need, but does not give them any responsibility or freedom of choice”* (n.d.). This paternalism is not limited to the state or employer, of course.

According to Beauchamp and Childress, paternalism is *“the intentional overriding of one person’s preference or actions by another person, where the person who overrides justifies this action by appeal to the goal of benefiting or of preventing or mitigating harm to the person whose preferences or actions are overridden”* (2013, p.215).

Health policies, according to Beauchamp and Childress, are beneficent as their goal is to benefit the population or prevent harm through the legislation of particular health Acts, such as the various South African Acts which I shall shortly be discussing. In the first place, the South African health legislation seeks to ensure that justice prevails, the innocent and vulnerable are protected. Secondly, when the laws governing the practice of forensic medicine are paternalistic, the medicine, the population in general will also be protected. My reasoning is that when unnatural deaths are investigated thoroughly according to the Acts mentioned below, this will hopefully lead to the conviction of the guilty parties involved in serious criminal activity, such as murder.

Also, by investigating sudden unexpected deaths, possible risk factors in communities relating to natural diseases causing death may be identified. This can lead indirectly to better health if these issues are addressed. By these two examples we can start to see that even without the consent of the family, and thus the autonomy of the deceased being indirectly undermined, the end goal is still for the ultimate benefit of the community.

It is apparent in the above discussion that the judicial system, including the Acts governing the practice of forensics, is paternalistic in nature. In law this may not be an overly negative, as was explained above. This holds true especially if the laws are ethically applicable. Therefore, I will consider some of the Acts related to forensic medicine and deliberate on possible ethical issues that may arise.

5.1.3 Dividing the principle of justice:

A principle of need is a valid material principle of justice (Beauchamp and Childress, 2013, p.251). In forensic medicine, the general need of all deceased individuals is to be treated fairly. This holds true even though the focus is less towards vulnerable groups and more towards vulnerability, as Beauchamp and Childress motivate (2013, p267). The authors reflect that to “*label*” an entire group as vulnerable “*disqualifies members capable of making their own decisions*” (2013, p267). However, I do believe that the entire group of deceased individuals, as a collective group, should be regarded as vulnerable. They cannot speak for themselves and are not capable of voicing their own concerns and opinions. I will briefly discuss vulnerability again later in this chapter when I reflect on the ethical aspects related to the Correctional Services Act.

Let us delve into the different aspects of the principle of justice, and the reason I chose to divide the principle of justice into three separate chapters. Moodley, Moosa and Kling (ed. Moodley, 2011, pp.73-85) attribute three obligations to justice. An obligation is a duty towards someone by which you are bound. These obligations arise out of a respect for morally applicable laws, respecting the rights of people and, lastly, the fair distribution of limited resources. I will apply these three obligations in the thesis to help unravel some of the ethical aspects in forensics related to the principle of justice. The first of these obligations pertain to the concept of legal justice. I will devote this fifth chapter to this obligation in relation to specific South African legislation. This is a very important aspect of forensic medicine and worth an entire chapter.

An excellent resource regarding all the relevant laws applicable to different health spheres can be found in Dada and McQuoid-Mason’s *Introduction to Medico-legal practice* (2001). I have focused on laws pertaining to the field of forensic pathology and pertaining to the performance of a post mortem investigation. This is not an exhaustive list of all the laws pertaining to forensic medicine. Other legislation also influences the medico-legal field, but not all will be discussed. An example of such a law would be The National Road Traffic Act, specifically relating to the blood alcohol level when driving. This Act is obviously important in forensics due to the high frequency of motor vehicle fatalities. To include all such laws and their contingent ethical issues is beyond the scope of this thesis. If another law is relevant to an ethical discussion, I will refer to it in the text. What follows is a summary of some of the laws specifically related to the forensic post mortem examination. After summarizing these seven acts, I will discuss some possible related ethical issues.

5.2 Legal justice: Legislation related to forensic medicine and attendant ethical issues

Forensic medicine cannot function independently of the laws. Legal justice is the golden thread running through forensic medicine; therefore, an understanding and exploration of the laws pertaining to the performance of forensic autopsies, brief though it is, is fundamental to this thesis.

I will refer to the governing legal Acts related to forensic medicine throughout the thesis. In the context of this thesis, law refers to statutory law; that is, to laws that were made by parliament. In other words, parliament is the originator of statutory law, which is referred to as Acts. An Act, before it is implemented and operational, is known as a draft bill. Once an Act is published in the Government Gazette it becomes operational. An Act needs to be passed by both the houses of parliament before the president also gives his or her assent. The other laws of the country include common law and customary law. The first refers to laws that are made by judges over a long period of time pertaining to rulings and sentencing. This common law was originally inherited from colonial times. By contrast, customary law refers to cultural laws that are applicable to particular demographic groups within South Africa. Two examples of population groups utilising customary

laws are the Islamic society and African customary law. The fourth source of law within the South African context pertains to the South African Constitution. As can be seen by the above mentioned brief explanation regarding laws, The Constitution is itself an Act; i.e. it was passed by parliament following the above-mentioned procedures of statutory law. Many regard it, however, as separate law, and as presiding over the other three categories of law. Thus, all other laws are regarded as subordinate to the South African Constitution and need to pass the test of constitutionality.

The National Code of Guidelines for Forensic Pathology Practice in South Africa booklet is outdated (August 2007). The NHA replaced the Human Tissue Act. The Health Professions Amendment Act, section 48 also replaced the previous section 56 of deaths associated with anaesthetics. This amendment now incorporates the procedure related deaths; thus, including anaesthetic deaths, but not limited to anaesthetics alone. This will be discussed in the next chapter. The Department of Health issued a Government Notice, signed by the minister of health, on 11 March 2014 in accordance with the NHA for the “*Establishment of the National Forensic Pathology Services Committee*”. This committee will address the issues raised by the NHA to ensure that the forensic pathology services are rendered as excellently as possible. The booklet will hopefully be updated soon to incorporate all these recent, and relevant, statute changes.

I now turn in my discussion to consider what each of the seven chosen Acts entail, as well as exploring possible ethical issues pertaining to each specific Act.

5.2.1 a) Inquests Act (Act 58 of 1959)

The Inquests Act's stated aim is: “*To provide for the holding of inquests in cases of deaths or alleged deaths apparently occurring from other than natural causes and for matters incidental thereto*” (Union Gazette Extraordinary, 1959, p.36). The Act defines what is meant by incidental death as “*the occurrences during which an injury which gave rise to the death was sustained or during which other occurrences which directly gave rise to the death occurred*” (Union Gazette Extraordinary, 1959, p.36). The Act includes the duty to report death, investigation as to the circumstances surrounding death and the reporting of the death to the relevant authorities and the procedures surrounding an inquest. Consent of the next of kin is not required for the performance of an autopsy in these cases. It also stipulates that a medico-legal report needs to be compiled and sent to either the Magistrate in the case of an inquest into the death, or to the Director of Public Prosecutions in the case of a criminal prosecution. Subsequent minor amendments to the Act are in place. The latest amendment is the Inquests Amendment Act of 1992 (Government Gazette, 1992), but no amendments affect the main purpose and structure of the original 1959 Act.

5.2.1 b) Brief ethical discussion of the Inquests Act: consent and harm

The ethical discussion around this Act will focus on the issue of negated consent, a concept on which I expand in chapter 9 in relation to the principle of autonomy. The absence of consent from the deceased and from living relatives for the performance of a forensic autopsy can be regarded as a possible ethical issue. Consent has become a buzz word in the field of bioethics. The term implies autonomy and respect for the individual. In relation to the Act's removal of the need to obtain consent, the risk emerges of possible abuse and harm, and herein lies the ethical challenge. Consent is not required from the immediate relatives, as would be the case in an anatomical pathology autopsy. A further aspect of negated consent concerns a prior, known ante mortem request by the deceased to not have a medico-legal autopsy, for whatever reason. In this instance, the Inquests Act overrides such a retained interest that the deceased may have had ante mortem.

Harming the deceased, then, is here linked to their ante mortem desire to not undergo a forensic autopsy. Knowing your decision making is incapacitated at the timepoint of demise can lead to ante mortem harm related fear of undergoing a legally sanctioned procedure you have no control over. This can, therefore, be an already anticipated harm, especially for specific religious groups such as Jehovah's Witnesses or Orthodox Jews.

Is it morally acceptable to exclude consent from the Act as in the case of the forensic autopsy? I believe so, on the same grounds put forward in the earlier discussion of paternalism. The protection of the general population, in a utilitarian way, is central for the justice system. When a life is taken away, especially through homicide, the function of the state should be to protect the majority over the one's autonomy. If consent was required for forensic autopsies, this could be an open door for injustice to prevail. An opportunity to decline could result in the guilty party getting away, literally, with murder. If no crime scene investigation or autopsy were done, then no DNA could be collected, which could lead to low conviction rates of suspects. This is, of course, one of the most important justifications for the lack of consent in forensic autopsies. Forensic medicine is probably one of the few examples in today's world of medicine where a lack of consent could be ethically justifiable in a utilitarian sense.

Even if consent is not required from the next of kin, and an ante mortem request of the deceased not to have an autopsy overruled, other retained interests can still be upheld. As I argued in chapter 3, the bodily integrity as an aspect of dignity remains important in the performance of the medico-legal autopsy.

5.2.2 a) National Health Act (NHA) (Act 61 of 2003)

The regulation of forensic pathology services by the NHA in terms of section 90 has replaced the now-repealed Human Tissue Act (65 of 1983). This regulation, published in the Government Gazette of 2007, stipulates which deaths are regarded as due to unnatural causes. These causes include:

- *“Any death due to physical or chemical influence, direct or indirect, and/or related complications.*
- *Any death, including those deaths which would normally be considered to be a death due to natural causes, which in the opinion of the medical practitioner, has been the result of an act of commission or omission which may be criminal in nature.*
- *Where the death is sudden and unexpected, or unexplained or where the cause of death is not apparent.”* (Government Gazette, 2007, p.33)

No consent is required from the next of kin under this Act. These criteria remain applicable even after burial, so that a body may be exhumed if necessary.

Chapter 8 of the NHA also specifies when tissues can be removed, used, or transplanted (Government Gazette, 2004, pp.60-70). The act also regulates the donation of tissues.

5.2.2 b) Brief ethical discussion of the NHA: resource distribution considerations

In this section, I will explore the NHA in relation to our current South African context. More specifically, I will reflect on the possible ethical issues that surface due to socio-economic environmental challenges and SUDA and SUDI cases. We saw earlier that the NHA stipulated what the law sees as a sudden unexpected death; *“Where the death is sudden and unexpected, or unexplained or where the cause of death is not apparent”* (Government Gazette, 2007, p.33). Another definition of sudden unexpected death is: *“Unexpected death following so rapidly from the*

onset of symptoms that the cause of death could not be certified with confidence by a medical practitioner familiar with the patient” (Mason,1995).

South Africa’s high rate of violence and of road traffic accidents, coupled with a large number of SUDA and SUDI cases, creates a high case load for forensic doctors in South Africa (Evert, 2011, p.3; Lorraine and Saayman,2012; Stats SA, 2017; Tiemensma and Burger, 2012). The latest statistics released by *Statistics South Africa* (Stats SA) in February 2017, specified that over 51 000 deaths were due to unnatural cases for the year of 2015 (2017, p.24). According to the National Health Act, all sudden, unexpected deaths without an obvious cause also need to undergo a forensic investigation to determine the cause of death. According to a South Africa article, approximately 70 000 medico legal autopsies need to be carried out annually in South Africa (Lorraine and Saayman, 2012). By a rough estimation, the difference between the approximate number of annual forensic autopsies and the number of those that are unnatural (as per Stats SA) tallies to an estimated 20 000 sudden, unexpected deaths.

Evidently, SUDA and SUDI cases increase the burden on FPS. Many of these sudden, unexpected death cases are in lower income bracket communities. A proportion of these deaths are due to hindered access to an overburdened state health system, where a lack of timeous attendance at emergency facilities or extended waiting periods to see a health care provider are the norm. I will pick up this concept in detail in chapter 7 in relation to distributive justice and resources.

The Act itself is not unethical in either wording or overall goal, but I do propose that the overflow to the forensic system can cause ethical challenges to emerge. These questions, to be discussed in the distributive justice chapter, increase in SUDA cases, leading to an increase in autopsies, as well as the added burden of harm to the deceased needing to undergo a physical disfigurement, and to surviving family, who have delayed access to answers as to the cause of death. This can result in a further delay in access to the estate and assurance. Since the majority of SUDA and SUDI cases (almost 80%, according to Tiemensma and Burger, 2012) are due to natural causes, the primary goal of the National Health Act ought to be to address socio-economic inequalities within the state health system. A secondary benefit will be to have less inappropriate referred natural cases.

5.2.3 a) Health Profession Amendment Act (Act 29 of 2007)

(Prior to amendment the Health Profession Act 56 of 1974)

This act stipulates what needs to be done in the case of a procedure-related death. The applicable section states:

“The death of a person undergoing, or as a result of, a procedure of a therapeutic, diagnostic, or palliative nature, or of which any aspect of such a procedure has been a contributory cause, shall not be deemed to be a death from natural causes as contemplated in the Inquests Act (Act 58 of 1959), or the Births, Marriages and Deaths Registration Act (Act 51 of 1992).” (Government Gazette, 2007, p.54)

This definition includes so called ‘anaesthetic deaths’ but is not limited to anaesthetic deaths alone.

5.2.3 b) Brief ethical discussion of the Health Profession Amendment Act: interpretation of the Act, ignorance versus negligence

Although the purpose of the Act is to stipulate which procedure-related deaths require forensic investigation, the 2007 amendment to the Act has created much confusion within the medical field

as to which cases need to be referred for medico-legal investigation. Many enquiries arise from doctors of all specialties, especially surgery and anaesthetics, to ascertain if a case requires referral for a medico-legal autopsy under the Act. The increased enquiry is partly related to the new wording of the Act. This amendment is no longer solely focused on anaesthetic-related deaths, but now incorporates all procedures. This change has led to a higher influx of cases, but also confusion as to when a case needs to be referred for a forensic autopsy. It is important to understand when a procedure has been a contributory cause and what is meant by procedure, as this quotation from the Act illustrates:

“The death of a person undergoing, or as a result of, a procedure of a therapeutic, diagnostic, or palliative nature, or of which any aspect of such a procedure has been a contributory cause...”
(Government Gazette, 2007, p.54)

When looking at the brief statement within this Act, it seems clear when it is required to send a deceased for a forensic autopsy, but it is not. The Act is broad and includes all procedures. It still includes all anaesthetics as before, both general and local, but also includes minor procedures, like a small skin biopsy for diagnostic purposes or the drawing of blood and putting up of an intravenous line. The amended Act basically entails that any time a procedure, of any nature, is a possible contributory cause of death, the case needs to be referred for a forensic investigation.

It is important to mention that the Act doesn't imply sending all deaths occurring when a procedure was performed. This would swamp the already pressurised forensic system with unnecessary cases. For example, say a person dies post-operatively after abdominal surgery for unidentified bowel obstruction. Intra-operatively, the individual was found to have advanced metastatic cancer, inoperable and too advanced to be compatible with life. The cause of death in this case is then related to the advanced metastatic cancer and not the procedure, anaesthetic or surgery. This death can justifiably and legally be certified by the treating physician as a natural death.

Ethical challenges can arise in circumstances where the Act ought to be followed but is not due to faulty diagnosis of the cause of death. For example, a patient arrives at the local hospital with suspected meningitis. The intern does a lumbar puncture without excluding raised intra cranial pressure, and shortly afterwards the patient dies. The death is certified as meningitis (natural) and not sent for forensic investigation as the lumbar puncture is not regarded as contributory, even though it was the direct cause of death. This, for apparent reasons, is unethical and negligent on the part of the treating doctor. If increased cranial pressure is not excluded and a lumbar puncture was done; then the procedure contributed, and this case should be referred for medico-legal investigation. The lumbar puncture that led to the hastened death becomes the contributory cause in both cases, and that then makes the deaths liable for forensic examination.

Unfortunately, the decline in anatomical pathology autopsies has also contributed to this ethical dilemma (Du Toit-Prinsloo and Saayman, 2012). These autopsies are usually done to clarify the underlying natural disease process' nature and extent and confirm specific natural disease diagnosis at death. Increased availability of diagnostic tools such as CT-scans, lack of hospital financial resources, lack of understanding of anatomical pathology autopsies, and the need for the families to consent and sometimes pay for the procedure themselves, are but a few of the reasons why this discipline may be in decline. Despite the remarkable capabilities of available modern day diagnostic tools, there remains a difference between the cause of death diagnosed clinically and the cause of death identified via autopsy (Zarbo, Baker and Howantiz, 1999).

5.2.4 a) The Births, Marriages and Deaths Registration Act (Act 51 of 1992)

“To regulate the registration of births and deaths, and to provide matters connected therewith” (Government Gazette, 1992, p.5). Part of the purposes of this Act is to define what constitutes birth and stillbirth, as well as the procedures to be followed in each case. The Act also stipulates the conditions under which a death certificate may be issued by a medical practitioner in the case of a natural death.

Prior to exploring ethical issues related to this Act, it is important to explain the importance of the registration of deaths in South Africa as governed by the Act. The death notification form (or death certificate, as many refer to it) is to register all deaths and stillbirths under the authority of the Department of Home Affairs. Stats SA then processes the completed death notification forms to analyse and gather important statistical information. These statistics are important for the government to reflect on the health status of the South African population and help in the planning of health interventions, including the allocation and distribution of funds within the national health budget. One of the main functions of forensic medicine is to help the magistrate determine the cause of death. The causes of death statistics (including the forensic data) are all compiled according to the regulations governing the statistics of the World Health Organisation (WHO).

Reports are easily accessed on the internet for public perusal. What follows are a few of the latest findings from *“Mortality and causes of death in South Africa, 2015: Findings from death notification reports”*, released 28 February 2017:

“Information of the cause of death can only be completed by medical practitioners according to the Births and Deaths Registration Act (Act No. 51 of 1992). Due to concerns about levels of violence and deaths due to accidents in South Africa, non-natural underlying causes of death are treated as a separate group. Non-natural causes of death encompass all deaths that were not caused by, or may not have been attributable to natural causes. In terms of the Inquests Act (Act No. 58 of 1959), these deaths are subject to medico-legal investigation. An autopsy must be done to find the cause of death, and an inquest is required. The results of the inquest are then sent to the Department of Home Affairs, which issues the final death certificate.” (Stats SA, 2017, p.19)

5.2.4 b) Brief ethical discussion of the Births, Marriages and Deaths Registration Act: forensic doctors as whistle blowers and retained interest in cause of death determination

In 2015, the number of deaths where the cause of death was established by post mortem examination accounted for almost a quarter of the total number of deaths, and 10% of deaths needed an autopsy to ascertain the cause of death (Stats SA, 2017, p.21). There is no specification as to where exactly these post mortems and autopsies were performed; namely, whether these were as academic/anatomical pathology autopsies or as forensic/medico-legal autopsies.

The alarmingly high statistics related to unnatural deaths also stood out for me. Unnatural deaths are also treated as a separate entity in the Statistical report (Stats SA, 2017, p.23). What is important to see from the forensic point of view, in relation to unnatural deaths, is that the statistics are still relatively high. Both the Western Cape and Gauteng had 13,2% and 11,7% unnatural deaths respectively recorded (Stats SA, 2017, p.47). Sadly, most of these unnatural deaths are in the age group of 15-29 (39,5%) (Stats SA, 2017, p. 44).

If the unnatural deaths at a specific medico-legal mortuary are related to a trend, such as the so-called vigilante deaths, this needs to be brought to the attention of the local authority. This is also

in accordance with the NHA's *Regulations Regarding the Rendering of Forensic Pathology Services* (2007, p.34) and will be discussed in more detail in chapter 7.

I argue that it is also unethical not to escalate these noted trends and merely do the preliminary required medico-legal investigation. If local and regional government departments are not aware of specific concerns, this poses a risk to certain population groups; if addressed, it may save lives.

As discussed in chapter 3, one of the identified continued interests of the deceased is related to the cause of death determination. The cause of death should be timeously reported and accurate, if not at the time of autopsy, then as soon as possible thereafter when all other appropriate investigations have been completed, such as histology, blood alcohol levels or toxicology. By completing the required medico-legal report timeously, the results of the inquest can be forwarded to the Department of Home Affairs and the final death certification issued. The system depends on the forensic doctor to render the best possible service, so that the final cause of death results can then also be included in the national statistics. This would indirectly result in less under-investigation and unclassified cases. The finalisation of the autopsy report in under-investigated cases can become complex. This is especially true if other related services are not functioning optimally, such as the overburdened toxicology laboratories. The backlogs of blood alcohol and toxicology results directly lead to a delay of final cause of death in some cases. This in turn has a knock-on effect in accurate death registration. I will elaborate more on this specific point in chapter 7. This delay in a timeous and accurate diagnosis undermines the retained interest the deceased may have had in their cause of death determination.

Delayed cause of death notification also increases the post mortem harm of the family. Closure is delayed, and the experience of grief exacerbated. This also influences the finalisation of estate and policy pay-outs. Everyone has an ante mortem interest to have their will executed timeously after demise. Knowing that this may be delayed, if you happen to have an unnatural death, could once again cause harm prior to death in raised anxiety and uncertainty. Unfortunately, most of us do not know when we will die. But if we knew that the forensic service functions optimally and does not delay diagnosis unnecessarily, this can lessen the anticipated ante mortem harm.

A report titled: *Towards a safer Khayelitsha, Report of the Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community of Khayelitsha* (O'Regan and Pikoli, 2014), raised an important point. It noted the implications for accurate cause of death formulation related to the poor attendance of South African Police Services (SAPS) investigating officers at the autopsies of Khayelitsha cases. Although it is probable that poor attendance at autopsies is generally true throughout the SAPS, the Khayelitsha SAPS attendance report is the only official documentation I currently have access to. Professor Wadee, the late head of the Division of Forensic Medicine at the University of Stellenbosch, testified "*that the value of the investigating officer attending the autopsy is that they can provide the forensic pathologist with information about the incident, which can be of assistance in determining the cause of death*" (2014, p.176). Obviously, the ideal is for the forensic doctor to attend every scene of death, but that is not feasible in this resource-strained profession with high levels of unnatural deaths. The forensic doctors rely on the death scene investigation report of the SAPS officers for important information that could aid in the cause of death formulation. I mention this under the ethical discussion of the Births, Marriages and Deaths Registration Act as the formulation of the correct cause of death has an impact on the statistics and resource allocation of the country in general. If specific causes of death are correctly stated, then these can also be correctly and appropriately addressed in the communities again.

For accurate cause of death determination, the forensic doctors need all the relevant details available of the pre-death, death scene, full autopsy results and toxicological analysis, if performed. To not be able to provide the correct cause of death timeously is depriving the country of valuable information. This is unethical, as the public in general, then, does not benefit from the correct distribution of appropriate resources and initiatives. These initiatives could be preventive or protective in nature. If, for example, all results of blood alcohol levels could be released quickly, we may see that this influences a lot of the motor vehicle deaths as a contributory cause of death, currently only stated as multiple injuries on the death notification form. If alcohol was contributory, this could aid in allocating more resources to detect drunken drivers, and stricter sentencing, for example. This in the end could lead to a decrease in road fatalities.

5.2.5 a) Occupational Diseases in Mines and Works Act (Act 78 of 1973)

This Act aims to “*consolidate and amend the law relating to the payment of compensation in respect of certain diseases contracted by persons employed in mines and works*” (Government Gazette, 1973, p.2). The Act further states that when a person who works or worked in a registered mine dies, their cardio-respiratory organs (namely the thoracic organs of the heart and lungs, including the main airways) need to be sent to the National Centre for Occupational Diseases (NCOD). The diseases compensated for are also specified in the Act.

In the case of a natural death the next of kin’s permission is necessary for the removal of the organs. In the case of a forensic autopsy the required organs may be removed by the forensic practitioner and sent to the NCOD without the consent of the family.

The specific conditions that are compensated as occupational diseases under the Act include the following (Government Gazette, p.4; McQuoid-Mason and Dada, 2011, p.134, p.306):

- “pneumoconiosis (silicosis, asbestosis, coal and mixed dust)
- tuberculosis (requiring at least 200 shifts worked and manifesting within 12 months of the last shift worked)
- chronic obstructive airways disease
- progressive systemic sclerosis (excluding the skin)
- asbestos-related pleural thickening
- chronic cerebral manganese poisoning
- lung cancer (i.e. carcinoma of the bronchus and mesothelioma due to asbestos)
- platinum salts sensitivity”

5.2.5 b) Brief ethical discussion of the Occupational Diseases in Mines and Works Act: retained interest in occupational exposure for compensation

The diseases specified within the Act (listed above) are natural diseases. This makes awareness of this Act by forensic doctors of great importance in the context of current or previous mine workers, since surviving family can receive compensation if the above mentioned natural conditions are present. The mine workers predominantly exposed to these natural conditions and at largest risk of contracting the diseases are those comprising the manual labour force of the mines. They come mostly from the lower income population of the mines, with greater exposure to environmental risks. Compensation then becomes an important, and in many cases even essential, life line for the families of the deceased, as in many cases the deceased may have been the primary bread winner of the family.

Occupational diseases are compensated under this Act and need to be considered in unnatural medico-legal investigations, such as a motor vehicle accident. If this is not considered this can be in violation of the Act, but also cause post mortem harm to the living relatives. The risk exists in medico-legal autopsies that this applicable history may be missed. As consent of the families is not required, or where deaths can result without even the knowledge of the families, as in unexpected deaths, the result can be forensic autopsies taking place without a proper history. Without a history of a deceased having previously been employed in the services of a mine, it can be easy to neglect the occupational disease aspect of the deceased.

To continue with the example of an individual dying in a motor vehicle accident, it is evident that a forensic autopsy is required. The cause of death is related to an unnatural death, and so reflected on the death certificate. Now, in the absence of an occupational exposure history, the forensic investigator may not be as vigilant to also look for signs of these “natural” diseases in the face of an unnatural cause of death. This could lead to the deceased’s cardio-thoracic organs not being sent to the NCOD, and the deceased’s family not being appropriately compensated. The ethical aspects relate to the harm that the improper investigation causes to the deceased indirectly (maybe even suffering ante-mortem with the knowledge that the occupational diseases may not be thought of at death and family not provided for appropriately). The families are also directly harmed as the compensation may be delayed or hampered due to lack of investigation into the occupational diseases aspect of the case. All doctors employed in forensic medicine need to be aware of this Act and be vigilant to think about occupational diseases. Especially in provinces with a large population of previous mine employees, this information needs to be sought prior to the forensic autopsy, even in the absence of consent and unrelated to the unnatural death *per se*.

5.2.6 a) Correctional Services Act (Act 111 of 1998)

This Act defines the reporting of unnatural deaths of prisoners where the medical practitioner cannot certify that the death was solely based on natural causes, falling under the Inquests Act (Department Correctional Services, 2014, ss.15)

In the case of an inmate dying, the head of the prison must notify the families of the deceased detainee. If the family suspects foul play, they can also ask for a forensic investigation to be undertaken.

5.2.6 b) Brief ethical discussion of the Correctional Services Act: Suspicion of foul play and retained interest in accurate cause of death and dual loyalty considerations

The Correctional Service Act covers the reporting of all unnatural deaths of prisoners. This includes all unnatural deaths in custody being referred to forensic pathology to be investigated. The problem is what about all presumed natural deaths in custody? It is obviously possible to mask unnatural deaths as natural ones. An example could be the death of an older prisoner known to have a heart condition. The presumed cause of death is then natural, and no investigation is called for under the Correctional Services Act. Instances of unnatural death that could be easily masked include smothering or even strangulation using a material-like ligature to hide any possible marks on the neck. Excited delirium is also a rare, but real, diagnosis that may be missed if not actively sought. An easily overlooked unnatural cause of death that may present as presumed natural death is so-called traumatic asphyxia. According to Dada and McQuoid-Mason (2011, p.312), traumatic asphyxia involves compression of the chest wall. This restricts effective inhalation and hampers breathing, ultimately causing asphyxia and death. Restraint of prisoners by correctional officers sitting on the prisoners’ chest can result in traumatic asphyxia. The slim possibility of death related to a drug overdose should also be considered, if the prisoner managed to get access to

illegal substances while in custody. Toxicological deaths are often easy to miss and interpret as natural deaths.

The stipulations of the Correctional Services Act provide at least one safety mechanism, which is the right of an inmate's family to request a formal forensic autopsy if they suspect foul play. Problems arise if a correctional service facility attempts to hide pertinent information from the family to avoid a full investigation. Many families may also be ignorant of their right to question a death presented as natural and may not feel they are able to question a high ranking, and often intimidating, correctional services official. This criminal conviction of the deceased family member may also make surviving family feel they can have no say in relation to correctional and judicial processes. If the rare causes of death mentioned in the previous paragraph are not thought of by the correctional services authorities or suspected by the family, a wrong cause of death can result, which is unjust and unethical. A high index of suspicion should underlie any death in custody.

The importance of ethics related to prison authorities under the Correctional Services Act cannot be overemphasised and was explored in the introductory chapter and chapter 3. I argued that the death of Steve Biko demonstrated the importance of accurate and unbiased investigation. It is important to be cognisant of the dual loyalty present in the correctional services.

Dual loyalty is defined by Pont *et al.* (2012, p.475) as “...*conflict between professional duties to a patient and obligations ...to the interests of a third party*”. This becomes a very difficult scenario, especially in prison settings. This is where a medical practitioner, including a forensic pathologist in the case of a deceased prisoner, has a loyalty to the prisoner as well as the employer, in this case the South African state. As we saw in the Biko case, the deaths of prisoners could be promulgated as “natural” deaths when in fact the prison authority is directly responsible for the death. If the whole body of the deceased prisoner is not carefully screened, then a subtle mark on the body caused by torture or other irregular activity, for example, could be missed. Pont *et al.* (2012) and Thomsen (2000) both emphasize the importance of the independence of the healthcare provider within a prison setting. Pont *et al.* state that there are different focuses dependant on the state authority governing prison care (2012). If the authority falls under corrective service, the main concerns are with safety and security, as opposed to the governance under the state health authority, where the main concern is the health care of prisoners. This will be discussed in the next chapter related to rights-based justice.

Even with this said, both departments are still state governed and can theoretically be “one” entity, and thus one of the loyalties mentioned, as opposed to the loyalty towards the prisoner. In South Africa, there still exists conflicts of interest - as related to any governing authority. At least in the post-apartheid government, after 1994, the health of prisoners falls under the Department of Health and not the Department of Correctional Services anymore. Prisoners are a vulnerable population group, even more so the deceased prisoner. Tarboda and Arboleda-Flòrez (1999, p.192) explain that due to the captivity of the prison population, with their freedom restricted by the captive environment, competent individuals are easily subjected to norms and morals that are subverted compared to those of the common population. This vulnerability becomes important to forensic doctors too as there is obviously reduced capacity of the deceased. I will briefly touch on the issue of research later in the thesis. At this point I will briefly elaborate on torture.

What is regarded as torture? In 1993, South Africa ratified the following definition of torture as laid down by the Commission Against Torture and Other Cruel, Inhumane or Degrading Treatment or Punishment: “*Any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted by or at the instigation of a public official on a person for such purposes as obtaining from him or a third person information or confession, punishing him for an act he has committed or is*

suspected of having committed, or intimidating him or other persons." (Quoted in Tarboda and Arboleda-Flòrez, 1991, p.191). Tarboda and Arboleda-Flòrez further state that they regard torture as predominantly a problem associated with less developed countries. However, even in democratic countries with advanced laws to protect the greater community, the possibility of authorities still abusing their "authority" is always a consideration. Corruption and corrupt individuals who regard themselves above the law do exist and should not be ignored. Thomsen (2000) pointed out that ethical issues, including torture, "*become more conspicuous in situations of armed conflict, in repressive regimes, or in countries with corrupt police or military forces*". Torture or any form of abuse, especially by the hands and under the authority of those who should protect, still exists, and should be investigated.

Under the above-mentioned definition of torture, it is clear why the forensic doctor also has an ethical obligation regarding the accurate, insightful documentation of injuries in the medico-legal examination of the tortured individual. This was emphasised in the older articles by Tarboda and Arboleda-Flòrez (1999, p.196) and Thomsen (2000), as well as the more recent article by Pont *et al.* (2012). The forensic doctor responsible for the death investigation typically does not have a previous doctor-patient relationship with the deceased and thus a typical obligation of confidentiality. The forensic doctor has a mandate to seek justice and truth. As torture per definition or any form of physical assault in various forms still exists in the correctional service context, all deaths in custody should be open for referral to forensics and appropriately investigated by forensic pathology when referred. These moral obligations should supersede any authoritarian structure. It is the moral obligation of the forensic doctor to always be aware of this possibility and to seek explanations in all deceased cases who died in custody. In the introduction of the thesis the emphasis was laid upon the importance of truth telling. The ethical problem of ignorance increases if only overtly unnatural deaths are referred for forensic investigation under this Act, i.e. all deaths in custody. This should include referrals from holding cells of SAPS police stations (in conjunction with IPID ACT), or prisons under correctional service or the military. Anyone detained who dies, even en route to the police station or prison, should be investigated to exclude the possibility of foul play, torture, or other irregular causes of death.

5.2.7 a) Independent Police Investigative Directorate Act (IPID) (Act 1 of 2011)

The IPID Act provides for independent oversight of the South African Police Services. The Act states that "*the investigation of the death of a person in police custody or the death of a person as a result of police action or omission or both must be done in accordance with this regulation*" (Government Gazette, 2012, p.7). The Act's main purpose relates to an impartial investigation of possible criminal offences by SAPS.

This objective relates to forensic pathology in the following ways:

- Any deaths in *police* custody (i.e. IPID deals with SAPS only and not with correctional services deaths)
- Deaths as a result of police actions

The IPID Act came into effect on 12 April 2012 and is the most recently passed of the statutory laws I discuss in this thesis. A provision was made by The Constitution for the independent investigation of any allegation pertaining to police services rendered. An independent oversight body to address this constitutional requirement was needed. The IPID replaced the previously known Independent Complaints Directorate. Until recently, no specific distinction was made between deaths in custody related to SAPS and those related to correctional services. The new IPID act was formulated to act independently from SAPS. The issue of dual loyalty in relation to an

ethical dilemma, as mentioned under the Correctional Services Act above, is thus decreased and all deaths in custody under the SAPS, such as deaths in holding cells, should now be appropriately investigated forensically.

5.2.7 b) Brief ethical discussion of the IPID Act: dual loyalty considerations

The dual loyalty considerations that flow out of this Act are like those discussed above in relation to the Correctional Services Act, namely, the possibility of hiding or obscuring data related to deaths of persons under police authority. The IPID Act aims to address this ethical issue within the context of the SAPS; it has no authority over correctional services.

The Act covers all deaths that occur in connection with the SAPS, not just unnatural deaths, as is the case with the Correctional Services Act. The two-fold objective of the law is firstly to investigate all deaths in police custody, unmasking possible unnatural deaths as mentioned above. Secondly, the investigation of any deaths because of a police action. In terms of dual loyalty considerations, the advantage of this Act is that it is independent, to a certain degree at least. The IPID's primary function is to remain objective and investigate all deaths equally without the influence of the authoritarian structures of the police service.

To better understand deaths in custody it is important to understand the division related to custody phases. Dada and McQuoid-Mason (2011, p.310) outline three basic phases of custody. First, the pre-custody phase involves the "*commission of a crime; flight, a chase or on apprehension; during a siege or hostage situation; and during restraint and submission*". Second, the custody phase is related to "*after admission or during interrogation or incarceration*". Third, the post-custodial phase refers to "*revenge by rival criminals or after further criminal conduct*". From the separation above it is evident to see how all the different phases have unique circumstances under which an individual can demise and play a role. Obviously, for an unfit individual to suffer a heart attack whilst being chased by the police due to the extra strain placed on the heart is not unusual. Restraining and apprehension methods could potentially cause injury and even death. The forensic pathologist needs to be aware of the different custodial phases as each uniquely impacts on the related causes of death. It is also extremely important for the pathologist to visit the scene of death, to get a broader perspective and gauge the accuracy of information supplied by the police in correlation with the death scene scenario. This is particularly so for the initial interrogation and restraining phase where the greatest risk of harm exists.

At the time the Act was passed many atrocities were happening in the SAPS that were going unchecked. Part of *The Khayelitsha Commission of Inquiry into Allegations of Police Inefficiency in Khayelitsha and a Breakdown in Relations between the Community and Police*, referred to earlier, relates to the importance of IPID (2014).

5.3 Conclusion

In this chapter I introduced the basic concept of justice. This was discussed in relation to the concept of fairness. The interface between law and ethics was discussed. A law is a legal norm governed by the state, with punishable consequences. In contrast, ethics evaluates moral decisions in relation to human conduct. The "*knowledge of and respect for morally acceptable laws is an ethical requirement in terms of upholding the principle of justice*" (ed. Moodley, 2011, p.73). Laws as paternalistic entities were also discussed. Paternalism in ethics is associated with reduced autonomy. Most laws can be seen as paternalistic in design, and this does not necessarily carry a negative connotation. Not everything in this above discussion about the various Acts governing the practice of medico-legal autopsies was overtly unethical. In many cases the Act itself leads to the

protection of the greater society. The overarching utilitarian approach of law was seen, although it can be translated as paternalism.

Seven Acts were explored in connection to their ethical applicability to forensic medicine. No overt unethical issue in relation to the laws or wording thereof can be easily surmised. Most of the ethical issues that surfaced had already been mentioned in chapter 3. The significance of the deceased having retained ante mortem interests, post mortem harm, dual loyalty concerns and the forensic doctor as a moral agent were important in this discussion. Issues that came out that affected the deceased in relation to these Acts is summarised below.

Under the Inquests Act, the mandatory reasons when a death would be investigated forensically were set out. This Act negates consent for the required medico-legal autopsy. The ethical issues when consent is not required were briefly discussed in connection to the harm that could theoretically ensue under these circumstances. This harm can be experienced by the family post mortem, or by the deceased ante mortem in anticipation of the unknown and undesirable.

Ethical questions in terms of resource distribution considerations were discussed under the NHA. Distributive justice aspects will be more thoroughly discussed in chapter 7. The Health Profession Amendment Act can be challenging in terms of its interpretation and execution. The procedural-related referrals for forensic investigation and determination of when a procedure has contributed to a death were discussed. The variation of referral rates between private and state health care to forensic services were also considered.

The Births, Marriages and Deaths Registration Act is important for South Africa's statistical purposes. These statistics influence fiscal allocations of funds; thus, it essential that death notifications should be accurately reflective of the cause of death. The accurate and timeous cause of death determination is also a retained interest of the deceased and can cause post mortem harm to the family if delayed or incomplete. This retained interest to an accurate diagnosis can also be present in any unnatural death where the deceased had worked in the mining industry. Under the Occupational Diseases in Mines and Works Act the deceased, and the surviving family, had an interest in occupational exposure for compensation purposes.

Both the Correctional Services Act and the IPID Act have an ethical concern for conflict of interest situations. The dual loyalty dilemma was discussed above and in chapter 3. A high index of suspicion of possible foul play and/or coercion related to deaths in police custody or correctional services should be maintained.

I will now explore the principle of justice in terms of rights-based justice application. In chapter 2 I argued that the deceased has moral standing. This moral standing will now be applied to the deceased in the justice arena.

Chapter 6: Justice – Part 2

An exploration of rights-based justice in the forensic medicine context

Rights-based justice and human rights

Justice is one of the principles of principlism and particularly relevant to forensic medicine. Three obligations can be derived from the principle of justice (ed. Moodley, 2011, p.73). The first obligation of justice, relating to legal justice, was discussed in the previous chapter. The importance of understanding the laws that govern the performance of medico-legal autopsies was explored and some of the possible ethical problems associated with these laws were noted. The second obligation pertains to rights-based justice, in relation to the respect for people's rights; it is this obligation that forms the focus of this current chapter. The third obligation, regarding distributive justice, will be discussed in the following chapter.

In Sandel's discourse about justice he reflects upon the relationship of justice to rights (2009) and relates justice to freedom. *"Most of these theories emphasize respect for individual rights, though they disagree among themselves about which rights are most important. The idea that justice means respecting freedom and individual rights is at least as familiar in contemporary politics as the utilitarian idea of maximizing welfare... And around the world, the idea that justice means respecting certain universal human rights is increasingly embraced (in theory, if not always in practice)."* (Sandel, 2009, p.16)

As Sandel noted above, the relationship between justice and rights is widely acknowledged internationally. This sentiment is echoed in the preamble of the United Nation's *Universal Declaration of Human Rights*: *"Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world."* (1948, p.1). This Declaration aims to identify foundational rights applicable to all humans, everywhere.

The basic understanding of a right depends on our understanding of humanity and the *"entitlements people can claim relating to their basic needs"* (ed. Moodley, 2011, p.88). The Oxford Dictionary (n.d.) defines a right as *"a moral or legal entitlement to have or do something."* A right can be on an individual basis or collectively as a group.

Unfortunately, as was evident in the introductory chapter, many basic human rights have been disregarded by previous world governments. The South African apartheid regime and Germany's Nazi regime are but two extreme examples where the rights of individuals were grossly denied, to the point of dehumanising individuals. The underlying denominator in both instances was one human group thinking itself superior to other human groups; that is, one group considering themselves entitled to more rights than other groups. Obviously, the devastating effects of the apartheid regime in South Africa and the Nazi's effect on Europe will always be in the history books as a reminder of the devastation that can be caused by disregarding rights, especially the right of equality based on common humanity. In what follows, I will explore the concept of universal equality, which should be accounted to the deceased as well. This is related to the deceased as an entity with moral standing, as argued in chapter 2.

Rights and obligations

Where there is a right there is also an obligation or duty towards another party to address the right. The HPCSA's first booklet pertaining to *General Ethical Guidelines for the Health Care Professions* alludes to the matter of duties: *"To have a right is to ask the question 'What do others owe me?'"*

and to have a duty is to ask the question ‘What do I owe others?’” (2008, p.4). When one thinks of what one owes to another, that is a duty. The right calls forth the duty.

Obviously, these rights and duties cannot be enforced as rigidly as laws. This becomes important when two different rights need to be balanced, as to determine which one in the specific circumstance takes precedence. As Beauchamp and Childress explain, “*all general moral norms are justifiably overridden in some circumstances.*” (2013, p.15), such as where confidentiality is justifiably breached “*to protect the rights of another person*” (Beauchamp and Childress, 2013, p.15). A right can thus be overridden if there is a stronger or more compelling right that is at play in the specific circumstances. A common distinction made is between *prima facie* rights and obligations, and other lesser rights and duties between *prima facie* rights and obligations as having precedence over other lesser rights and duties. Duties that are regarded as *prima facie* are “*those of confidentiality, non-maleficence, beneficence, and respect for autonomy*” (Beauchamp and Childress, 2013, p.16). Ethical dilemmas are not always easy to solve when competing, equal *prima facie* rights need to be balanced against each other. This tension between rights is very familiar within the South African HIV context, where the tension is between the confidentiality of a patient’s HIV status versus a sexual partner’s right to informed consent

A further consideration concerns the question of *who* carries the duty of meeting the right. Without a responsible party the right is invalid. London (ed. Moodley, 2011, p.92) explains that the state is usually regarded as responsible for four duties in terms of rights. These four duties are (ed. Moodley, 2011, p.92):

- A duty to respect rights. Laws must be in place to ensure rights are not violated, especially those of vulnerable people. The negative obligation is refraining from “*actions which would violate rights*”.
- A duty to protect rights. Action should be taken to protect rights from third party violations. This can be in the form of legislation.
- A duty to fulfil rights. This is an active obligation towards meeting the duty related to “*budgeting, planning and providing services and infrastructure*”.
- A duty to promote rights. This obligation of the state is related to the education of the population regarding their rights, with structures in place to promote awareness.

These four duties are emphasised by the South African Constitution. The Constitution is the foundation upon which the South African democracy is built. The statute was promulgated on 18 December 1996. One of the Constitution’s most important sections pertains to the protection of the rights of all people in South Africa and is known as the Bill of Rights (The Constitution, 1996, pp.5-20). This document deals with various inalienable human rights and echoes international human rights law, particularly the *Universal Declaration of Human Rights* (UDofHR) (1948) that grew out of the atrocities that abounded in the Second World War under the Nazi regime. The South African Bill of Rights affirms the fundamental human rights of dignity, equality, and life (1996, Constitution of South Africa, ss.10, p.6).

Another important governmental document that pertains to rights in healthcare is the *Patients’ Rights Charter*, which is incorporated into the HPCSA’s *Guidelines for Good Practice in the Health Care Professions* (2008, booklet 12).

In chapter 2 the importance of ascribing moral status to the deceased individual was explored. That chapter laid the foundation for this rights-based chapter. The deceased were shown to have moral standing in relation to their human properties, relationships with the living, modified moral agency, and cultural and religious considerations. Based on these it is fair to state that the

deceased is then entitled to certain limited basic rights and obligations. The argument I initially made stated that, if the deceased has moral status, then moral agents have obligations towards the deceased. I now take this statement further and suggest that not only does the deceased have moral status with certain obligations owed them, but the deceased also has rights, and the obligation towards the deceased is focused on the deceased's rights.

As referred to earlier, history has illustrated that people who are regarded as inferior in moral standing (based on whatever separation) have had fewer rights attributed to them, and abuses of human rights have then flourished. This is exactly why we need to reflect upon the rights of the deceased individual and not just stop at the attribution of moral status.

Wildfire *et al.* make important remarks pertaining to this discussion of the deceased's rights (2007, p.476). Firstly, the authors state that the rights of the deceased may or may not be applicable after demise. Secondly, that all the different role players' rights need to be considered when addressing ethical dilemmas. This includes the rights of the deceased, of family and of medical professionals. A living patient has the "*moral supremacy*" in relation to their rights as they are the primary party experiencing harm and vulnerability (Wildfire *et al.*, 2007, p.476). When a patient dies, the capacity for harm is reduced and suffering diminished and therefore some rights have also been relinquished. The public's health right, as per HIV example, focuses on rights and "*encourages moral pursuits, at the expense of affection, sympathy and trust*" (Wildfire *et al.*, 2007, p.476).

The rights I will focus on in considering the retained rights of the dead are the right to confidentiality, right to a fair trial and right to identification. Of course, many other rights of the deceased could be discussed. I have chosen to highlight these three as they feature significantly in the forensic medicine domain.

6.1 Right to confidentiality

The right to confidentiality is fundamental to the law and is affirmed in several important South African documents. The National Health Act 61 (2003) states that all patients have the right to confidentiality. This is echoed by the South African Constitution and written into the National Patients' Rights Charter; an entire booklet (number 10) is devoted to it by the HPCSA (2008). Regarding confidentiality and privacy, the Patients' Rights Charter states: "*Information concerning one's health, including information concerning treatment may only be disclosed with informed consent, except when required in terms of any law or any order of court*" (HPCSA, 2008, booklet 3, p.2). According to the HPCSA, the doctor of a patient may give confidential information under the following circumstances: "*in terms of a Statutory provision, at the instruction of a court, in the public interest, with express consent of patient, with the written consent of a parent or guardian of a minor under the age of 12 years, in the case of a deceased patient with the written consent of the next of kin or the executor of the deceased's estate.*" (HPCSA, 2008, booklet 10, pp.2-3).

Obviously, the deceased was not aware of pending death in many cases and likely no prior legal document (such as a specific living will or a power of attorney document) was drawn up to specify what exactly the deceased would have wanted the loved ones to know. However, forensic pathology is a sensitive and legally protected field of medicine. This means that the court has a right to all the confidential information related to forensic investigations, especially with regards to diagnosing cause of death. Thus, even if the deceased did have a living will specifying that no personal information regarding health should be made known to anyone after demise, it may be inevitable for this information to be made known. In this case, the legalities of the case clearly override the will of the deceased. This said, however, not all medical information may be necessary

in the formulation of the cause of death, as we shall see later. No need to include as example at this stage if you are going to do an in-depth discussion later.

Confidentiality and access to information

The second important, and difficult, issue pertaining to confidentiality relates to third parties desiring access to the confidential medico-legal report. Here I am not referring to the judicial structure as third party, but to the family, insurance companies and others. What is one obligated to share? Are there parties that have a greater right to the confidential information? For the deceased's family, especially in cases of sudden, unexpected deaths, the information related to the cause of death may assist with closure. The key issue in the divulging of information is related to where the information could jeopardise any potential criminal case. That is, if the confidential information could in any way influence the proceedings or findings of a judicial inquest -this may constitute a punishable offense under the Inquest Act. If the cause of death has no bearing on a judicial inquest, it could potentially be shared with a third party, preferably the immediate next of kin. A clear example is if a person dies suddenly and unexpectedly from a heart attack and foul play was excluded; obviously, sharing this information with the family can be a huge relief and help the family come to terms with the death. This information would probably also be stated clearly on the death notification form and the death certificate would be issued to the family by the Department of Home Affairs anyway. In a simple forensic case of SUDA without foul play, the motivation to disclose personal information should pose no ethical problems.

Conflict of interest

The real problem of confidentiality and privacy matters lies with 'sensitive' information. HIV is a much-deliberated ethical confidentiality issue. Similarly, toxicology results can be tricky. Blood alcohol results of the deceased in motor vehicle fatalities can pose a huge issue regarding disclosure as well, especially related to life insurance claims. Life insurance companies usually require personal medical information, which causes a conflict of interest. Blood alcohol results are even more problematic as the backlog of toxicological analysis of forensic cases, referred to in the previous chapter, contribute to the delay in the completion of the final autopsy report. This also delays the accessing of information by family members wishing to come to terms with the death. If blood alcohol reports could be processed more efficiently, then the inquests could hopefully be completed more quickly, and the family have faster access to information required to finalise claims for life insurance policies.

It is unethical to divulge information related to a medico-legal case if based on mere speculation. If the death is presumed to be related to alcohol, prior to toxicological analysis, and this unsubstantiated claim communicated, this can cause post mortem harm to the deceased and their family. The ideal option would be for the entire case to be finalised by the authorities as soon as possible, within the legal framework, such as to determine what the full extent of the confidential information is prior to disclosure. Unfortunately, this is not possible in the South African context. The forensic doctor is but one link in the chain of confidential information, in a much-overburdened structure lacking resources, which will be discussed in the next chapter.

Ethically the forensic doctor, as moral agent, should not be coerced to divulge sensitive or unsubstantiated information. An important loyalty of the forensic doctor should be with the deceased and upholding their right to confidentiality. Even after demise harm can ensue and any information obtained during the autopsy must be treated with sensitivity.

The media and privacy

Another important issue relates to the divulging of confidential information to the media. Many public figures have died unnatural deaths with confidential information becoming public knowledge all too soon. Later chapters will explore in more depth the media's relationship to confidential information, looking particularly at the confidentiality issues revolving around deceased celebrities and mass disasters. The difference between confidentiality and privacy is subtle and complex. Both can be regarded as rights in their own separate capacities. As I understand it, confidential issues relate to certain personal matters such as choice of sexual orientation, health, and lifestyle and can be disclosed only with consent from the relevant party involved. By contrast, privacy refers to those elements of the self over which one desires complete control, with access to this information (even by governing authorities) being extremely limited and by express permission only (Beauchamp and Childress, 2013, pp.311-312). Some individuals feel that confidentiality is an ethical issue, while privacy is a right. According to South African law, both are equally regarded as rights, but with different meanings attributed to each. The NHA includes "*that all parties have the right to confidentiality and this is consistent with the right to privacy in the South African Constitution (Act 108 of 1996)*" (HPCSA, booklet 10, p.2).

It can be unethical to divulge information, but also unlawful. The Inquest Act, discussed in the previous chapter, helps to clarify the issue of confidentiality. The National Code of Guidelines for Forensic Pathology Practice in South Africa refers to this Act in the section: *Confidentiality of medico-legal post mortem findings and reports* (2007, pp.12-13). From these guidelines, the post mortem reports, the documents used to convey autopsy findings, are instrumental in reporting the relevant findings (which may include sensitive or confidential information) to the courts. This report may only be issued to authorised persons, and copies of the report can only be issued via the investigating officer of SAPS to other parties if requested, such as the family. A large amount of legality revolves around the confidentiality of forensic cases. It is important to understand the structures wherein the information in these cases may be given. Death certificates also are connected to the confidentiality of forensic cases, as they require full and truthful disclosure. This is a legal obligation in accordance with the Births, Marriages and Deaths Registration Act, as pointed out in chapter 5, and this will also lead to disclosure of information, indirectly as it may be, but still disclosure.

Confidentiality and HIV

According to the British Medical Association's statement, confidentiality is well summarised as: "*The ethical duty of confidentiality extends beyond the death of the patient, although legislation...permits limited disclosure to be justified based on the particular circumstances and knowledge of the patient's wishes...often a decision to disclose will not be based on the interest of the subject but is made to protect other people and the public at large.*" (Wildfire *et al.*, 2007, p.475)

I will now succinctly discuss the right to confidentiality of the deceased by way of an example in the forensic medicine context. This example is very relevant in the South African context, and the world for that matter, as it relates to HIV status. The article written by Wildfire *et al.* (2007) also uses an example of the deceased being HIV positive and unaware of this health issue at the time of demise. The sister of the deceased then asked the doctor specifically if her brother had been HIV positive. This example reminded me of one of my own sudden, unexpected forensic cases. The deceased's cause of death was related to his HIV positive status. The wife of the deceased wanted to find out the cause of death and if her husband had been infected with HIV. As a forensic medical officer, I was confronted with conflicting principles and obligations. The first conflict was as

a moral agent with my loyalty towards the deceased to protect this confidential medical information. I suspected that he may have been infected for a while already, given the outcome of the disease and the relationship with the cause of death. If I presumed that he was aware, why did he not choose to disclose his HIV status to his wife prior to demise? If he was ignorant of this diagnosis, would he have wanted his wife to know? The next conflict was in relation to the surviving family member that requested this information, namely his wife. The conflict of interests in my situation differed from the earlier example of the deceased's sister requesting information as to her brother's HIV (Wildfire *et al.*, 2007). In my case, the weight of the obligation to the wife as the requesting third party was important. The reason HIV as a medical diagnosis is different from, say, heart disease is related to the association with the sexual conduct of the person, as well as often the stigma related to that conduct. This medical information can have a significant impact on the surviving sexual partner. Anyone can choose to have a test anytime, but knowing a partner has HIV motivates strongly for having one. The decision of disclosure weighed towards the wife being informed and was in keeping with the HPCSA guidelines (Booklet 10, p.6).

Wildfire *et al.* also asked if there is a hierarchy of rights in "*Whose rights are more important?*" (2007). This question becomes very difficult to answer if the diagnosis was made post mortem without any prior written documentation to state the deceased's wishes with regards to disclosure of personal information. The balance between the right to confidentiality of the deceased and the impact of non-disclosure to the third parties is difficult. If the non-disclosure results in a life-threatening scenario to any of the third parties involved, then the disclosure is essential, as illustrated above. In other words, in the case of HIV, the intimate partner, has a significantly weightier right to know the HIV status of the deceased, as this information impacts his or her own health directly. In this scenario, it is clear to see why the intimate partner of the deceased would have a higher 'right' to know the HIV status than the sister. I believe that the infringement of the deceased's confidentiality is justified morally under the utilitarian theory in favour of public health. Why would the public benefit if only the intimate partner is at immediate risk? This may be because the intimate partner of the HIV infected deceased may in fact have contracted HIV as well. Now they may again be involved in other sexual relations, which poses a risk to the new intimate partner/s if they did not know their status and use protection.

This leads me to mention the duty to warn a third party at risk, as illustrated well by the Tarasoff vs Regents case in the United States of America. The third parties in the two examples given above, namely the sister and the wife, represent the 'society'. In the Tarasoff case the judge made a statement during sentencing that has general applicability for discussions of ethical problem solving. This statement is often quoted in ethical literature in the biomedical field as it has significance to the healthcare profession in general regarding the issue of confidentiality. It reads: "*the right to patient confidentiality ends when public peril begins*" (Wildfire *et al.*, 2007, p.477)

These two examples pre-empt similar ethical questions pertaining to the deceased and their right to confidentiality. When one considers the rights of the deceased, it is important to realise that the deceased is not the only one with rights in a right-based approach to biomedical ethical dilemmas. The deceased's rights (in the forensic context as opposed to the patient in clinical settings) are contrasted with the rights of the family to have access to confidential information. The duty of the doctor to tell the truth, maintain confidentiality and act in the best interests of the deceased as well is difficult. It is clear to see that the individual role players' rights can be in conflict. We saw earlier that all rights are not absolute and can be qualified depending on the ranking of the different rights. This entails that all the different individual rights need to be balanced. This balancing is made more difficult in the absence of clear directives left by the deceased regarding confidential medical information.

Obviously, when the third party is the legal structure involved in forensics, it is apparent that the deceased cannot continue to exhibit indefinite rights to confidentiality over against the residing laws governing the medico-legal field. This also holds true for the completion of the death certificate. Does the completion of the death certificate impinge upon the right to confidentiality of the deceased? It could potentially be viewed as an avenue of confidentiality breach of the deceased. Most public health issues neglect the patient's (and deceased's) rights for the greater benefit of the community, which is of course a balancing act of its own.

6.2 Right to identification

Upholding dignity

The identity of the deceased is one of the main questions with which the Inquests Act is concerned (Union Gazette Extraordinary, 1959, p.42). Before I explore the right to identification as relating to the forensic medicine field, I will briefly explore the right to dignity mentioned earlier in the chapter. One of the fundamental principles of human rights globally pertains to the right to human dignity. In the UDofHR, the first article states that "*All human beings are born free and equal in dignity and rights*" (UDofHR, 1948). Human dignity is also one of the foundational rights underscored in the South African Constitution: "*Everyone has inherent dignity and the right to have their dignity respected and protected.*" (1996, p.1247).

Dignity, as a concept, can be viewed as a validation of who you are, and in rights' terms as the right to be valued. The word is derived from the Latin word *dignitas* meaning 'worthiness' in its basic form. The Oxford Dictionary defines dignity as: "*state or quality of being worthy of honour or respect*" (n.d.). In regarding dignity, one can either look at the concept as the essence of life itself and the sacredness thereof, or on the other end of the spectrum as implying individual choice or autonomy (Shell, 2008). Another way Shell phrased it would be at one end is the "*conservative and religious right*" and the other is the "*liberal and secular left*" (Shell, 2008). One of the fathers of philosophy, Immanuel Kant, approximately three centuries ago already, started to explore the concept of dignity as related to human agency and the capacity for individuals to choose their own actions - what we today call "free will". His discussion was advanced for his time and remains applicable to our contemporary era. Shell explored the concept of dignity by exploring Kant (2008). She quoted Kant in her essay as part of the President's Council of Bioethics: "*What is related to general human inclinations and needs has a market price; that which, even without presupposing such a need, conforms with a certain taste. Has a fancy price; but that which constitutes the condition under which alone something can be an end in itself has not merely a relative value, that is, a price, but an inner value, that is, dignity... Morality, and humanity insofar as it is capable of morality, is that which alone has dignity*" (Shell, 2008, ch.13).

As we can see the concept of dignity is linked to being human. The right of dignity is thus linked to the identity of individual human beings, which leads to the importance of the right to identification. If an individual is not identified, it becomes difficult to attach dignity to the specific individual, and thus violates the foundational right to dignity.

Missing people and unidentified bodies

The author Nuzzolese also links this underlying right to human dignity to the right of identification, arguing that the "*lack of (or incomplete) human identification procedures infringe upon a range of human rights*" (2012, p.55). He highlights the significance of identification in missing people particularly since those presumed missing may still be alive. Nuzzolese quotes from the Red Cross's *Missing persons: a handbook for parliamentarians*, which states that "*once the fate of a*

missing person has been determined to be death, all available means must be undertaken to ensure recovery of the body and any personal effects” (2012, pp.54-55).

Once a body is recovered the forensic team becomes involved. In these unidentified cases, identity is also linked to the determination of the cause of death as per South African law under the Inquests Act (1959, p.42). The importance of identification is also briefly discussed in the National Code of Guidelines for Forensic Pathology Practice in South Africa (2007, pp.30-31). The issue of identification is complex as the correct identity of the deceased has far reaching consequences for the deceased in the greater sense of dignity, as well as for the family of the deceased. Clearly the identity is then linked to various other important legal and non-legal matters. Some of the legal matters include: when a case is linked to a punishable offense under the law, or in civil legal issues pertaining to the deceased being declared dead and the possible re-marriage of the partner, or life insurance claims. The non-legal importance pertaining to the identification of the deceased is directly linked to the next of kin and their own grief and coming to terms with the death of a loved one. I will later discuss the implications of non-identity in relation to bereavement.

Nuzzolese mentions the absolute importance of a good international system of co-operation when it comes to the identity of missing persons (2012). He also emphasises that an improper post mortem “*may lead to a delayed identification – [which] represents a violation of human rights and international humanitarian law*” (2012, p.55). In the South African forensic setting the system in place for the identification of bodies is mentioned in the National Code of Guidelines for Forensic Pathology Practice in South Africa (2007, p.46-49). Cases where the identity of the body remains unknown after seven days at a designated FPS facility are classified as “*unidentified cases*”. Under these circumstances, the guidelines require that fingerprints be taken and submitted to the SAPS Local Criminal Record Centre (LCRC) and to Home Affairs for the establishment of the identity. The collection of DNA by the forensic practitioner is also essential for comparative analysis within the population registers of South Africa. Additional measures are necessary if the bodies are “*charred, mutilated or decomposed*”; these include dental recordings, preferably radiological; skull and facial sinus x-rays; or tissue from the body (where possible) for DNA comparison. In some unidentified cases, the media can be utilised to aid in the identification. Team work between all the different governmental departments (including FPS under the Department of Health, the SAPS, and the Department of Home Affairs as a minimum) is critical in determining the identity of the deceased. The procedures in place to determine identity need to be adhered to; to do less than required would be unethical and negligible. After thirty days, the unidentified body is referred to as an “*unidentified and unclaimed*” body, where after the process for pauper burial is initiated. I am not going to mention all the detail involved in these processes, as that is beyond the scope of this thesis.

In the dissertation by Evert on *Unidentified Bodies in Forensic Pathology Practice in South Africa*⁶, one of the problems highlighted is that many unidentified cases may probably not have comparative fingerprints or DNA in the population registers of South Africa (2011, p.7). The high influx of foreign nationals from neighbouring countries, seeking better employment options, and even the increase of the urban populations, correlates with a high proportion of missing persons. Interestingly, Evert showed that there are more unidentified males than females in South African medico-legal facilities (2011, pp.2, 31). In summary she mentioned the enormity of the issue pertaining to unidentified cases in the forensic setup at the FPS laboratory of Pretoria, with approximately 7% to 10% of referred cases in the study period remaining unidentified (2011, pp.29-32). Unfortunately, the full extent of the problem of cases of unidentified deceased

⁶ The study was conducted from 1 January 2005 to 31 December 2008 at the Pretoria medico-legal laboratory. It was a retrospective descriptive study of all the unidentified bodies at the facility in that 3-year period (Evert, 2011, p.23)

individuals in the medico-legal field is not known (Evert, 2011, p.56), but if one looks at international studies and trends this appears to be a global issue (Nuzzolese, 2012, pp.47-48; Evert, 2011, p.47).

DNA databanks

One of the ethical issues arising from the identification of the unknown deceased pertains to the use of DNA databanks, specifically as an infringement of human rights and the privacy of individuals related to the revealing of inherited qualities (Giardina, Spinella and Novelli, 2011, p.269). This ethical problem pertaining to genetic information being "*identity revealing*" and providing the ability to thus link an individual with another based on established relationship is, ironically, exactly the premise that it used in the identification of the unidentified body, based on these "inherited" qualities of DNA (Giardina, *et al.*, 2011, p.269). One of the ethical issues that should be considered pertains to the suggestion of linking international databanks, or countries accessing one another's databanks, for genetic identification, as migration across borders is a huge issue globally (Nuzzolese, 2012, pp.47, 55). The ethical issues raised by this suggestion are huge as not all countries have similar laws promulgating the governance of these databanks. The ethical considerations resulting from the accountable governance pertaining to the management of such collaboration is important, locally, and especially globally (Giardina *et al.*, 2011, p.269).

South Africa recently promulgated the Criminal Law (Forensic Procedures) Amendment Act (2013) on 27 January 2014. The primary purpose of the regulated National Forensic DNA database (NFDD) is intelligence for the purposes of combatting crime. The Act seeks "*to establish and regulate the administration and maintenance of the National Forensic DNA Database*" (Government Gazette, 2014, p.2). Identification is a secondary benefit of the regulated NFDD and the Act itself clearly stipulates this intention "*to assist in the identification of missing persons and unidentified human remains*" (Government Gazette, 2014, p.2). It is still early days, and research and evaluations are still required to determine how effective the Act will prove to be in practice, particularly in assisting in identification processes. Author Meintjies-Van der Walt also explored this complex issue of a National DNA databank in South Africa (2011). The costs related to an effective and well governed, centrally organised DNA databank will remain applicable (2011, p.12). The ethical and legal implications of a DNA databank are complex and largely related to the genetic privacy rights of individuals regarding the power of DNA to act as an identifier of personal and private information (Van Camp and Dierickx, 2007, p.263). Much literature is available exploring the ethical and legal issues of DNA databanks, but I will not explore this in this thesis.

Another important reason for identification pertains to post mortem harm reduction. In the second chapter, the continued relational importance of the deceased to the living was emphasised. The grief experienced when a loved one dies supports the importance of identifying an individual for their relatives to go through the grief process and mourn properly. Again, I quote Tomasini; "*the identity of a recently dead person is ambiguous because of our continued emotional attachment to them*" (2008, p.446). Even in the unidentified deceased, even if unknown and emotionally unattached, it remains important to identify these individuals. Why do I say that? As they are still "*individuated*" and, in a sense, these individual characteristics are still a discernible pointer towards a life that was lived (Tomasini, 2008, p.448).

Identification and culture

Lastly, the right to identification in relation to culture is also relevant. The significance of identification is not only important from relational, legal, and ethical perspective perspectives, but also culturally. The cultural and religious significance of the dead was explored in chapter 3 but

needs to be briefly mentioned here again. I propose that if the deceased is not identified, the cultural and religious preferences of the deceased cannot be fully appreciated and adhered to. This is also a possible infringement of the deceased's rights, as was outlined in The Constitution under article 30 and 31 of the Bill of Rights.

The importance of mourning rituals and grieving procedures was emphasised in chapter 3 when reflecting on Setsiba's dissertation. South Africa is not the only country, or Africa the only continent, attaching significance to the dead and to death rituals. These rituals can add meaning to the remaining loved ones. Many cultures attach great significance to the mourning process of the deceased and if identification is not paramount in the forensic investigation, this can lead to great injustice from a cultural perspective to the individual, grieving families and communities. For some cultures, not being identified during the forensic investigation could delay the important transition to join the ancestors. This can in effect harm the deceased post mortem.

These are some of the reasons why the identity of the deceased in these sensitive cultural and spiritual spheres is essential, as the deceased continues to have value after death. The unidentified deceased, by contrast, forfeits their last right to be mourned and respected appropriately within the cultural context. The families of an unidentified loved one that has died will struggle to come to terms with the uncertainty, and as such the natural and normal bereavement process is delayed. This uncertainty can be linked to "torture" in a way (Nuzzolese, 2012, p.52), even more so in times of wars or natural disasters where the inevitable is almost expected, but certainty concerning the fate of loved ones may not be possible. Much has been written about this delayed mourning process. The implications of non-identity can therefore have far reaching consequences legally, ethically, culturally, and religiously.

6.3 Right to a fair trial

The South African Constitution under subsection 35 that discusses the rights of the "*Arrested, detained and accused persons*" (Bill of Rights, 1996, pp.1259-1261) reinforces the importance of the right to a fair trial and all the specifics this entails:

"Every accused person has a right to a fair trial, which includes the right- (a) to be informed of the charge with sufficient detail to answer it; (b) to have adequate time and facilities to prepare a defence; (c) to a public trial before an ordinary court; (d) to have their trial begin and conclude without unreasonable delay; (e) to be present when being tried; (f) to choose, and be represented by, a legal practitioner, and to be informed of this right promptly; (g) to have a legal practitioner assigned to the accused person by the state and at state expense, if substantial injustice would otherwise result, and to be informed of this right promptly; (h) to be presumed innocent, to remain silent, and not to testify during the proceedings; (i) to adduce and challenge evidence; (j) not to be compelled to give self-incriminating evidence; (k) to be tried in a language that the accused person understands or, if that is not practicable, to have the proceedings interpreted in that language; (l) not to be convicted for an act or omission that was not an offence under either national or international law at the time it was committed or omitted; (m) not to be tried for an offence in respect of an act or omission for which that person has previously been either acquitted or convicted; (n) to the benefit of the least severe of the prescribed punishments if the prescribed punishment of the offence has been changed between the time that the offence was committed and the time of sentencing; and (o) of appeal to, or review by, a higher court." (Bill of Rights, 1996, p.1261).

It is clear from this excerpt from the Constitution that the accused person has the right to a fair trial. Our own law is in keeping with the UDofHR: "*Everyone is entitled in full equality to a fair and public*

hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him." (UDofHR, 1948, Article 10). "Everyone charged with a penal offence has the right to be presumed innocent until proved guilty..." (UDofHR, 1948, Article 11).

I postulate that the fair trial not only extends to the accused, as the one standing on trial, but that the underlying moral value of fairness attributed to the trial proceedings should also include fairness towards the deceased. It is logical to presume that when the trial is fair, it should be fair to both the accused and the deceased, in the instance where the trial is of course related to death and the circumstances surrounding that death in forensic medicine cases. This deduction made can also be seen when looking at the definition of the word fair as an adjective, according to the Oxford Dictionary (n.d.) as: "*Treating people equally without favouritism or discrimination*".

One may ask oneself what a right to a fair trial has to do with this discussion of rights-based justice. If a right involves "*entitlements people can claim relating to their basic needs*" (ed. Moodley, 2001, p.88), then the right to a fair trial can be seen considering a person's, including the deceased's, need to be fairly tried. A discussion regarding factors influencing legal trials will be discussed, with a focus on the forensic practitioner as expert witness. I will explore the influence of the media relating to a fair trial in chapter 8.

The Constitutional right to a fair trial should be extended towards the deceased as well, based on the moral standing of the deceased. It is important to mention that the court setting itself is but one of the possible outcomes for forensic cases when a criminal prosecution is needed. Although this seems to be the primary pre-occupation of the media and public, the concept of a "fair trial" and the principles I will highlight can be extrapolated to any possible medico-legal case. This is irrespective of whether the medico-legal case is sent to the Magistrate in the case of an inquest into the death, or to the Director of Public Prosecutions in the case of a criminal prosecution. The role of the forensic doctor as a watch dog for the justice system and safety net for the greater society is of utmost importance, since the right to a fair trial begins long before its destination.

The foundation of the right to a fair trial starts with the legal framework of the country. As such, the South African Constitution and Acts governing the medico-legal field are fundamental. I will illustrate the importance of a fair trial by dividing the medico-legal process into three phases and briefly discuss some of the important components of each section with relevance to the right to a fair trial. The first section will be the pre-autopsy phase, followed by the autopsy itself, and lastly, the post-autopsy phase. All these phases accrue to present the best possible case to be presented to the judge or magistrate. Understanding some of the detail and ethical issues that are relevant to each of these phases is important, and forms part of the current vision of the FPS:

"Forensic Pathology Services has as its primary objective the rendering of a medico-legal investigation of death service that serves the judicial process. It is essential that the standardised and uniform protocols and procedures are followed nationally, rendering objective, impartial and scientifically accurate results." (National Code of Guidelines for the Forensic Pathology Practice in South Africa, 2007, ss. 5, p.5)

6.3.1 Pre-autopsy phase

The pre-autopsy phase is focused on the crime/death scene investigation. The important elements to consider in this phase are the people present at the scene and the collection of evidence. Emergency medicine services and the SAPS are usually the first responders to an alleged death scene. It is essential to secure the scene. This pivotal function directly influences the case as evidence collection has become extremely important in the forensic field. Without appropriate

evidence, the entire case may possibly be discarded. This was emphasised in the *Towards a safer Khayelitsha* report of enquiry, mentioned in the previous chapter, on the importance of securing the scene and ensuring that it is not contaminated prior to evidence collection (O'Regan and Pikoli, pp.174-175). Unfortunately, due to the extremely high volumes of unnatural death scenes daily in South Africa, including unnatural deaths in hospital settings, this requirement is daunting. It is unrealistic to expect a forensic doctor to attend all death scenes, or even all homicide-related death scenes. The "gold standard" is, of course, that a forensic pathologist should attend every suspicious and clearly unnatural death scene.

I will not go into the detail of the required tasks of the forensic doctor at the scene as this is beyond the scope of this thesis. The right to a fair trial is enhanced by thoroughness and adhering to occupational guidelines. This will assist the court to make a well-informed decision based on all the evidence presented when the forensic doctor is called to be an expert witness, as I argued in chapter 2.

Let me briefly say something about DNA collection at the crime scene. As mentioned earlier, the entire criminal justice system is relying increasingly on forensic science technologies such as DNA profiling to determine the legal outcomes (Tarboda and Arboleda-Flórez, 1999, p.197; Giardina *et al.*, 2011, p.257; Walsh, 2005, p.53). "[W]here technologies eliminate the need for juries, judges or magistrates to determine subjective questions", DNA is viewed in the scientific community, as well as by the public, in this matter (Walsh, 2005, p.53). Walsh also highlighted that DNA is perceived as neutral and infallible as it "*connotes a value free, objective systemisation of decisions and processes where discretionary and subjective judgments are minimized, if not totally eliminated and the truth assumes a mathematical perspective*" (2005, p.53). A large amount of controversy surrounds the utilization of DNA as the end all and be all in the criminal trial as it is viewed by some as a violation of the accused's right to bodily integrity and the general presumption of innocence until proven otherwise. The whole concept of the taking DNA from a suspect can be a "Catch 22" situation, whereby giving permission to take DNA may in fact incriminate the suspect in the process as well (Walsh, 2005, p.53). This is obviously a topic that deserves future deliberation, which lies beyond the scope of this specific thesis. In this discussion on the right to a fair trial from the deceased's viewpoint, the objectivity of DNA collection at the crimes scene is essential.

Giardina, Spinella and Novelli reproduce an excerpt from Kirk's 1953 *Crime Investigation: Physical Evidence and the Police Laboratory*, which emphasises the importance of the death scene collection of evidence:

"Wherever he steps, whatever he touches, whatever he leaves, even unconsciously, will serve as a silent witness against him. Not only the fingerprints or his footprints, but his hair, the fibers from his clothes, the glass he breaks, the tool mark he leaves, the paint he scratches, the blood or semen he deposits or collects. All of these and more, bear mute witness of the moment. It is not absent because human witnesses are. It is factual evidence. Physical evidence cannot be wrong, it cannot perjure itself, it cannot be wholly absent. Only human failure to find it, study and understand it, can diminish its value" (2011, p.257).

I end this pre-autopsy phase with a brief note about the death scene in a hospital; specifically, cases that need to be referred for medico-legal investigation, such as deaths related to procedures, as stipulated in the Health Profession Amendment Act, and of course all unnatural deaths, as stipulated under the Inquests Act. These scenes of death should be taken seriously and be regarded with the same significance as crime scenes outside of the hospital environment. Essential traces of evidence are lost in the mayhem usually pertaining to these deaths in hospital. At a minimum, wounds present pre-surgery should be well documented as soon as possible as

essential information, such as measurements of gunshot entrance and exit wounds, can be lost during surgical procedures. Projectiles removed from body cavities must be documented and the police informed.

In addition, it is essential to not remove any medical interventions present within and surrounding the body, as some of these medical interventions may have contributed to or even be the direct cause of death. Removal may interfere with the determination of death by the forensic practitioner at the autopsy. For example, checking the correct placement of the endotracheal tube. All medical notes, as per requirement of the Inquests Act, should be given to the investigating officer or forensic doctor. This is not only legally required, but also impacts on the outcome of the case, and as such the fairness of the trial in the end.

6.3.2 Autopsy phase

The autopsy phase focusses on activities directly linked to the deceased in the forensic pathology mortuary. This includes the autopsy itself and all ancillary investigations required for the performance of the medico-legal investigation to present a forensic post mortem report that can assist the judicial process. The forensic pathologist needs to understand the laws pertaining to the performance of a medico-legal autopsy, as discussed already. The autopsy itself needs to be meticulous with close attention to detail, as set out in the procedures to be followed in the National Code of Guidelines for the Forensic Pathology Practice in South Africa. This is because the main purpose of the medico-legal investigation revolves around the establishment of the cause of death in relation to the probable mechanism of death and circumstances surrounding death (2007, p.9).

Conflict of interest in attendance of autopsies

Legally, the Inquests Act stipulates: *“At any examination conducted by a medical practitioner in terms of subsection (2), no person other than- (a) a policeman; or (b) any other medical practitioner nominated by any person who satisfies the magistrate within whose area of jurisdiction such examination takes place, that he has a substantial and peculiar interest in the issue of the examination, shall be present without the consent of such magistrate or the medical practitioner conducting the examination”* (Union Gazette Extraordinary, 1959, s.3, p.38).

According to the law *no unauthorised* person shall be present at the medico-legal investigation, without prior arrangement. The legal importance of upholding this law is clear from an ethical point of view as well. If there is an appropriate reason, permission, can be sought for attendance. The law helps, but it does not answer all the difficult questions posed earlier. Many of the questions will have to be evaluated on a case by case basis.

The main ethical issue pertains to who can attend the autopsy from outside FPS. This concern is only briefly discussed in the National Code of Guidelines for the Forensic Pathology Practice in South Africa (2007, p.12). This issue is important and worth elaborating on in more detail here. This gives rise to various conflicting situations where coercion is possible. The SAPS officer can legally attend the post-mortem investigation. I will present a few questions which encapsulate these conflicting situations and highlights the challenge the forensic doctor can encounter. Is it ethically permissible to allow the treating clinician of the deceased to attend the autopsy? Can the surgeon or anaesthetist request to attend the post mortem of one of their patients to ‘learn from the case’? What about the rural setting in South Africa where the local general practitioner performs the medico-legal work due to lack of other resources. Can this doctor perform an autopsy on his own patient or on his colleague’s patient? Can a specialist in a specific field be asked to come and be present at the autopsy to highlight certain technical details to the forensic doctor? The field of medicine is rapidly expanding and new procedures and advancements in technologies are

occurring with rapidity in all specialties; it is understandable that the forensic doctor cannot regard him/herself as an expert in all fields of medicine, although a general good understanding of all fields is essential. How does one negotiate the complexities that the forensic doctor is bound to face? To what degree should other medicine specialties be involved with the forensic department?

It is obvious to see why the doctor doing the post mortem on his own patient, or his colleague's patient, is not easily justified. This can leave fertile ground for possibly hiding the truth under this possible dual loyalty situation. Many a person would not readily compromise themselves by mentioning if there was any contribution on their part that led to the demise of the patient. There may also be an established relationship with family of the deceased, which further compromises the objectivity of the attending practitioner. It may be difficult to determine who the obligation is to. Will the doctor be able to remain steadfast to his or her obligation to the deceased?

The issue pertaining to confidentiality was discussed at the beginning of this chapter, but remains problematic, especially if the clinical practitioner is now the practitioner doing the autopsy too. What is the obligation and duty towards the family? Obviously, the obligation towards the judicial structure is to perform an objective service within the governing laws; however, in this case the doctor may struggle to overcome subjectivity. These dual loyalties that present themselves in this specific scenario are not conducive to the right to a fair trial either. This complexity was also reiterated in the National Code of Guidelines for the Forensic Pathology Practice in South Africa, which states: "*it is not desirable that a medical practitioner should perform a medico-legal post-mortem examination on one of his own patients, or the patient of his assistant, partner or locum tenens*" (2007, p.12, s.44). Although it is not illegal, then, it should be avoided, which makes ethical sense. This is certainly a topic that warrants more exploration in the future.

Retention of organs

The retention of certain organs, as part of the medico-legal investigation, is required in certain cases, such a death whilst undergoing cardio-thoracic surgery. As in the case of autopsy attendance, the retention of these organs is also governed by the Inquests Act: "*For the purposes of any examination mentioned in... (a) any part or internal organ or any of the contents of a body may be removed therefrom; (b) a body or any part, internal organ or any of the contents of a body so removed there from may be removed to any place.*" (Union Gazette Extraordinary, 1959, s.3, p.36).

From a legal point of view, the forensic doctor can retain necessary and appropriate tissues which can contribute to the formulation of the cause of death. However, as mentioned in chapter 3 and 5, everything that is lawful is not necessarily ethical (Taborda and Arboleda-Flòrez, 1999, p.190). Some of the ethical issues related to the retention of body tissues from the deceased relates to interest to have bodily integrity upheld, post mortem harm and interest in confidentiality. The forensic cases that warrant removal of tissues for further microscopic evaluation for the sole purpose of establishing or verifying the cause of death are understandably appropriate, as most of these are internal tissue samples that do not impact bodily integrity. The family, in turn, will not have to deal with any gross disfigurement and may benefit from accurate cause of death formulation. If large skin sections may be indicated for microscopic evaluation, this needs to be communicated, as well as any other alteration required that changes the external appearance of the deceased. This is especially true of the face as a feature of identity and upholding bodily integrity.

In some forensic cases, the removal of a large organ is required, as in the case of a motor vehicle accident where diffuse axonal injury is suspected and needs to be sought on a microscopic level;

thus, the need to dissect the brain in a controlled environment, preferably in consultation with a neuropathologist or senior colleague where possible. Even the removal of the brain and other indicated internal organs will go “undetected”. Does the fact that the law negates the consent aspect, requiring no ante mortem permission from the deceased nor post mortem permission from family, make it morally right to not inform the family?

When any organs, especially emotive organs such as the heart or brain, are removed without the consent of the family (as in forensic medicine), this can cause harm to the family when they find out and they may feel deceived, as I alluded to previously in chapter 2 (Tomasini, 2008, pp.442, 443, 446). Does this mean that forensic practitioners should not inform the grieving families of the removal of organs, if this disclosure can lead to greater harm when perceived? It is not possible to put a detailed informed consent procedure in place for forensic medicine, which would help to alleviate the harm caused (Tomasini, 2008, p.448). I will make recommendations in my concluding chapter regarding the need for an internal system where families can be informed if certain organs were removed and the reasons why. This would respect the deceased’s retained interest to have their bodily interest upheld and can alleviate possible post mortem harm. The cultural and religious importance of many families to bury their deceased intact (complete without any organs missing) was also illustrated by Tomasini (2008, pp.442, 446-447). Ways to alleviate prolonged grieving should be sought.

6.3.3 Post-autopsy phase

The post autopsy phase includes the compilation of the medico-legal report and a possible trial as an expert witness. The evidence of the case needs to be presented in such a way that the judge or magistrate clearly understands the case after having read the report. The integrity of evidence is vital, such as discarding evidence that is contaminated and upholding the chain of custody, as these can influence the verdict. This can lead to a guilty party being acquitted based on poor evidence which is unable to prove guilt beyond reasonable doubt. The deceased is then harmed post mortem as he/she is not vindicated, and the grieving family can also be harmed.

The importance of timeous toxicology analysis and DNA processing is apparent and was discussed previously; I will allude to some of these aspects in chapter 8. It is important to note that the compilation and completeness of the autopsy report is an essential component in helping the judge reach a fair conclusion in relation to the evidence gathered and portrayed. As such the deceased’s reputation and right to fair trial is upheld after death, and the family can come to terms with the, many times, traumatic nature of the death. Once again, the role of forensic evidence cannot be overemphasised in aiding the criminal justice system by a truthful and reflective autopsy-reporting and unbiased expert witness in court, if required.

In all cases referred for medico-legal investigation, as set out under the Acts mentioned in the previous chapter, the most important characteristic of the pathologist as a moral agent should be truthfulness. Without truth, the entire justice system is jeopardised. The moral significance of truth in the right to a fair trial as an expert witness is important. In chapter 8 I will discuss the influence of media on having a fair trial as well.

I end this discussion of the right to a fair trial with a quote from Voltaire: “*We owe respect to the living; to the dead we owe only the truth*” (Wildfire *et al.*, 2007).

6.4 Conclusion

In this chapter rights-based justice, as an extension of the exploration of the principle of justice, was explored. The right to confidentiality was extensively explored in the context of forensic

medicine and the deceased. The importance of upholding the right to identification was also argued and especially the relevance, not only to the deceased, but also the grieving families. The identity of the deceased in relation to the diverse culture of South Africa was also emphasised. Upholding religious ideas is also obvious for the same reasons as the cultural context. At the beginning of my discussion on rights-based justice, I argue that respect for human dignity is of utmost importance. I think this statement holds true, whether dead or living. Everyone, especially forensic doctors as moral agents, have a duty to treat all cases with dignity. This was also emphasised in the discussion on the right to identification. This is in keeping with the UDofHR and our own Constitution. Lastly, the right to a fair trial was explored by means of three different phases related to the medico-legal investigation. The moral characteristics of the forensic doctor to ensure that the deceased is not treated unethically was also alluded to.

Chapter 7: Justice – Part 3

An exploration of distributive justice in the South African context of forensic medicine

In chapter 5 I explored the principle of justice as related to some of the most significant laws pertaining to the governance of medico-legal autopsies. These laws were noted briefly and discussed in terms of their ethical applicability. In the previous chapter, a second discussion was focused on the principle of justice as a rights-based entity. I argued that the deceased could be credited certain rights, even post mortem, and therefore obligations are attributable to these rights in the forensic sphere. The three rights I chose to discuss were the right to confidentiality, the right to identity and the right to a fair trial. By now it is apparent that the principle of justice is an important principle in relation to the forensic sphere. I will now discuss a few of the ethical challenges relating to distributive justice, as a sub-division of justice. This is relevant in the resource-constrained environment that we face in South Africa.

Distributive justice

“What is fair for whom? An understanding of core justice principles of distribution, procedure, and inclusion offers insight into this situation and allows for generalizations to other conflicts. However, only a recognition of the impact of identity on justice allows us to ask who counts—both individuals and groups—and how concern for their well-being will be reflected in specific individuals’ preferences for procedure and outcomes.” (Clayton and Opotow, 2003, p.307). Although the authors’ discussion was in relation to justice models influenced by identities, this quotation has overtones of distributive justice to it. The authors’ question, *“What is fair to whom?”* emphasises the underlying challenge of distribution and resource allocation (Clayton and Opotow, 2003, p.307).

This distributive justice discussion is well articulated by Sandel: *“To ask whether a society is just is to ask how it distributes the things we prize—income and wealth, duties and rights, powers and opportunities, offices and honors. A just society distributes these goods in the right way; it gives each person his or her due. The hard questions begin when we ask what people are due, and why.”* (2009, p.9). As can be seen, the argument is not about mere distribution alone, but what is regarded as fair distribution and to whom, a sentiment which echoes Clayton and Opotow’s question above. Sandel subsequently explores three approaches to the question of distribution, namely, maximising welfare, respecting, and advocating freedom of choice and, lastly, nurturing virtue (2009). At times, these approaches oppose each other; Sandel’s discussion evaluates the strengths and weaknesses of each approach.

Another succinct definition of distributive justice is: *“fair, equitable, and appropriate distribution of benefits and burdens determined by norms that structure the terms of social benefits”* (Beauchamp and Childress 2013, p.250). Moodley, Moosa and Kling write that the distributive justice component refers to *“fair distribution of limited resources”* (ed. Moodley, 2011, p.73). In the opening justice chapter, I quoted Aristotle’s well-known phrase from his *Nichomachean Ethics* namely: *“Equals must be treated equally, and unequals must be treated unequally”*. This statement, at its core, is a distributive justice statement.

Dada and McQuoid-Mason ask the following question in their bioethics discussion of the principle of justice: *“Who ought to receive the benefits and bear burdens?”* (2001, p.37), which is also fundamentally about fair distribution of resources according to need, i.e. distributive justice. South Africa is a resource-limited nation, especially in the state health sector. Since forensic medicine is

governed/administered by the state, it has significant resource constraints. The right to access to health care is one of the major ethical discussions pertaining to the rights-based justice approach.

In chapter 2 I attributed moral status to the deceased. In distributive justice, this status means that the deceased should also be acknowledged. It also entails that we can ask questions of what fair distribution towards the deceased is. As previously argued in chapter 3, the deceased has certain ante mortem interests that remain post mortem. I also discussed the applicability of certain universal rights that still apply to the deceased in the previous chapter. Both the retained interests and attributed rights, related to the deceased's moral standing, imply that the deceased should therefore be attributed certain resources in accordance. Obviously, the distribution would be related to upholding the retained interests of the deceased, or regarding their attributable rights.

If the deceased still retain some rights, such as the right to dignity and truth and a fair trial, that also means they have a right to the distributive component of the resources needed to fulfil these rights. Distributive justice in relation to forensics cannot be exactly matched and compared to a healthcare system of distribution of resources, as there are obvious differences between the 'needs' of the deceased and those of an ante mortem person accessing routine health care. The resources distribution discussion in FPS should involve at a minimum the service delivery components for optimal functioning. I will thus briefly explore what resources are fundamental during forensic work to render the best possible service within the legal framework.

I will focus on the resource need in relation to three role players in this sphere of medicine. First, the deceased, then the forensic doctor and, lastly, the greater society. These three role players all operate within the complex socio-economic climate of South Africa, namely a culturally diverse, developing nation. The economic constraints of our country play a significant role, both within the forensic sphere itself and in discussions of distributive justice. This was recognised early in the National Code of Guidelines for Forensic Pathology Practice in South Africa: "*It is in the interests of economy, that unnecessary autopsies and special laboratory investigations should not be performed.*" (2007, ss.13, p.9). The onus is on the forensic doctor to perform an excellent post mortem examination with medico-legal consequences, within a limited financial setting. Any discussion around distribution of resources is never easy.

7.1 Socio-economic considerations and the deceased

The overburdened South African forensic system, dealing with vast annual numbers of unnatural and unknown deaths requiring medico-legal investigation, clearly has resource constraints. When the demand is higher than the supply of service, problems will inevitably surface. There is not only a shortage of forensic doctors, but of other resources too, such as specialised equipment to help in the post-mortem investigation, and delayed toxicology analysis and diagnostic modalities in cause of death determination, to mention but a few.

In this section I will discuss the influence of delayed toxicology analysis as related to the deceased. I will mention the influence of radiological imagery in the deceased, as well as considering the use of radiological imagery. I will then look at the investigation of infant deaths in South Africa and challenges related to accurate diagnosis of cause of death. Genetic testing as a diagnostic modality will also be briefly noted.

Retained interest in cause of death determination and delayed ancillary investigations

The identity and cause of death determination are important from a legal perspective as per the NHA and Inquests Act, as discussed in chapter 5. We saw that an accurate cause of death is important to both the deceased and living relatives. The cause of death determination was also

identified as a retained interest of the deceased. I also suggest that delay in cause of death finalisation, as per issuing the death certificate or timeously compiling a report, hampers accurate information regarding South Africa's annual national mortality statistics, and even fiscal allocation of funds. No one benefits from unreported or unspecified causes. Unfortunately, one of the major delays in some of the cases under investigation, specifically at forensic pathology services, pertain to the huge delay in reporting of forensic toxicological analysis by the three national forensic chemistry laboratories in Cape Town, Pretoria, and Johannesburg. This delay in blood alcohol levels (ante and post mortem alcohol samples) and toxicological analysis results in delay in the formulation of cause of death, or in determining whether a toxicological element was a possible contributory cause.

This problem of delayed toxicology and blood alcohol level determination has enjoyed much media coverage, especially in the last few years. One of the questions posed to the Minister of Health in the South African National Assembly in 2013 dealt with this concern. According to the Minister's written reply issued on 15 November 2013, as of 31 October 2013 the number of unprocessed toxicology samples at the national forensic chemistry laboratories stood at 3667 samples in Cape Town, 7431 in Johannesburg, and 5919 in Pretoria (National Assembly, 2013, p.1). News 24 reported last year that there had been an overall decline in outstanding unprocessed samples: for example, in Cape Town, from 3527 in January 2014 to 1222 in January 2016 (Evans, 2016). The toxicology backlogs had decreased from 2014 but were still high in February 2016; with Cape Town at 2878 unprocessed samples, Johannesburg at 7843 and Pretoria at 5013 (Evans, 2016). This toxicology backlog seems to be an ongoing issue related in part to the high burden of unnatural deaths (deceased individuals over 18 years old require blood alcohol testing in a medico-legal autopsy), the high rate of drunken driver incidents, coupled with a lack of manpower and possibly even political will. This was reiterated in the *Towards a Safer Khayelitsha* report as well (O'Regan and Pikoli, 2013, p.178).

The involvement of the media and the questioning of the Minister of Health at the 2013 National Assembly highlight the value of possible 'whistle blower' initiatives in making both government and the public aware of forensic concerns. The two-fold problem firstly results in delay of finalisation of post mortem reports, which again influences the national statistics of death notification forms as per Stats SA, as discussed in chapter 5. The second important issue pertains to many families of deceased individuals and victims' families not having closure due to the delay in the finalisation of the autopsy report, or even delays in court cases. The delay also has repercussions in finalising financial claims pertaining to life insurance policies for example, as stated by Du Toit-Prinsloo and Saayman (2012, p.54).

How does this issue influence the deceased? As I mentioned previously, harm can be caused ante mortem, in the sense of anxiety over not knowing when one might die and if your death will require ancillary investigations that will delay the cause of death determination. Knowing that your cause of death formulation may be delayed, and a life policy may not pay out timeously, can cause ante mortem harm. Delay in cause of death determination, even years sometimes because of delayed toxicology analysis, significantly contributes to the post mortem harm of the surviving family as well.

Retained interest in identification and radiological imaging

In the previous chapter I touched on the importance of identification and the deceased. The impact that non-identification can have from a harm perspective was discussed in detail. Identification is influenced by the time that has lapsed since death to identification. Obviously, a delay in this process directly influences the possibility of accurate identification, due to decomposition. This

becomes important in mass disasters, as well as unknown individual bodies. The impact that 'not knowing' can have on the living relatives, such as not knowing where their family members are or if they have died, delays closure and prolongs grieving. The uncertainty over a missing person that is not identified was said to be equalled to torture (Nuzzolese, 2012, p.52)

Lack of good institutional policies and timely service delivery hampers identification both non-scientifically (visual identification such as facial features or clothing) and scientifically (fingerprints, DNA, and radiography). The spate of forensic pathology officers 'downing of tools' in South Africa led to significant delays in autopsy performance as bodies were not timeously dissected in 2017. This directly influenced the cause of death determination and identification process due to decomposition setting in. Accurate histological findings are hampered in sudden, unexpected death cases where microscopy is often the only clue of diagnosis on a cellular level. Decomposition also influences collection of tissue for DNA profiling and photographic imagery as a visual aid, which contribute tremendously in identification. The recent delay in forensic autopsies was to a degree also a product of lack of funds for standardised education of forensic officers, which would obviously lead to more funds needing to be allocated towards salaries of the upskilled workers. Upskilled and salary-satisfied employees obviously lead to enhanced service delivery, as well as reduction of harm towards the deceased and their families. This was also referred to in Saayman's statement above (2017, p.4).

Current television series on death investigation, such as Bones, C.S.I. (Crime Scene Investigation) or N.C.I.S (Naval Criminal Investigative Service), have led in some way to tremendous expectations of forensics in peoples' eyes, especially when it comes to DNA and related matters; this is the so-called CSI Effect. As aptly stated by one researcher, "*one of the problems facing forensic scientists is that the general public often has an unrealistic expectation of what forensic science can achieve.*" (Walsh, 2004, p.55). Lack of good DNA samples influences the identification.

One of the methods that is too under-utilised in identification is radiology assistance. In the National Code of Guidelines for Forensic Pathology Practice in South Africa, the value of obtaining x-rays was noted briefly, but not stated as an absolute requirement; the wording indicated, "*where possible*" (2007, p.47). Once again, this correlates to the distributive justice milieu of South Africa's complex socio-demographics. Only a handful⁷ of medico-legal mortuaries have the highly sophisticated, very expensive Lodox equipment for radiological assessments. But that said, many mortuaries do have access to general radiology services at their local health facilities. The importance of odontology and anthropology in identification, specifically dental identification for the unknown deceased, was emphasised in the previous chapter with reference to Nuzzolese's work (2012), who is himself a forensic odontologist (2012). This technique of identification of skeletal remains, especially the dentition, can be essential and definitive: "*If antemortem dental records are available for an individual then dental identification is as certain as those of fingerprints*" (Philips, 1993, p.487) Professor Philips is the leader in the field of forensic dentistry in South Africa and an author of numerous publications on this subject. He also reiterated the fact that this expertise should be readily available, with no barrier to access if required. He stated that "*the determination of age, sex and race of skeletal remains; dental ethics and jurisprudence as well as malpractice also form part of the duties of the forensic dentist. The five dental schools in South Africa each have a forensic team which is consulted on a regular basis by forensic pathologists and district surgeons. Forensic dentists are active members of the medicolegal team and should be consulted on a regular basis especially in cases where identification is concerned.*" (Philips, 1993, p.487).

⁷ At the time of this dissertation 9 medico-legal mortuaries had Lodox equipment available in South Africa. For the latest update go to their website: <http://lodox.com/installations/#Forensic>

Even with this said forensic odontologists are not often utilised, due to various reasons, including geographical access restrictions, resource restraints, and limited expertise in this specialised area.

One of the barriers hampering the use of whole-body x-rays, including x-rays of the skull focussing on the sinuses and dentition, is the lack of uniform national institutional guidelines. For most of the medico-legal facilities, having to utilise local health radiology departments if they require any x-rays can be a laborious process. This involves transporting the body, or remains thereof, from the mortuary to the radiology department, requires quite some organisation and effort on the part of the forensic doctor involved. The radiology department may also be hesitant to x-ray the decomposing corpse or skeletal remains, and it may have to fall outside of normal service hours. If the Lodox or other radiological device is on site at the medico-legal facilities, this greatly enhances the chances of having routine radiological images of the body, including dental x-rays which can aid in identification many years after demise.

It is clear from the brief discussion above that a lack of funds can hamper the legal requirement of identification. The forensic doctor may also not have the time, motivation, or institutional guidance to organise the radiological imaging of the deceased at the local radiology facility. Good national standards are needed to enable local standardised protocols that aid in the medico-legal process, especially when additional testing, such as radiology, may be beneficial.

Retained interest in cause of death determination in sudden, unexpected death cases

Currently, the investigation of sudden, unexpected deaths in infants (SUDI) are investigated medico-legally as per the Inquests Act 58 of 1959, but many ancillary tests are not routinely done. A multi-centre study in South Africa that looked at over three thousand SUDI cases over a five-year period found that most of the infants investigated died of natural causes (76,5%), with SIDS cases amounting to only 8,7% (Du Toit-Prinsloo *et al.*, 2013, p.344). SIDS is a diagnosis of exclusion, but obviously can only be given once a cause of death has been investigated. In South Africa, this diagnosis should ideally only be made after exclusion of gross pathology by means of a thorough autopsy including negative histological or laboratory findings and, if possible, a death scene investigation. Unfortunately, this study clearly highlighted the tremendous variation of institutional approaches to the investigation of SUDI cases (Du Toit-Prinsloo *et al.*, 2013).

No standard national protocol currently exists in South Africa in relation to SUDI cases, which could partly explain this difference in investigation. This is scientifically undesirable as meaningful comparisons between the centres becomes difficult. Currently the resource constraints of investigation in South Africa precludes the death scene investigation of all infant cases by the pathologist (there are too few doctors and too many SUDI cases) as well as various internationally suggested routine ancillary tests. The lack of standardised, routine laboratory investigations throughout centres is an ethical concern which surely impacts on the cause of death determination. This impacts the family directly and can have legal implications. Without standardised protocols in these cases it may be immensely difficult to differentiate between unnatural and natural cases, and even miss incidents of homicide. This was partly the concern of Lang *et al.* too (2010).

I want to move to a specific ancillary investigation that has important ethical issues linked to it. I am referring to genetic testing as part of an investigation of cause of death. Firstly, I will discuss genetic testing in infants, then its importance in certain adult cases. The lack of uniform ancillary investigations in SUDI cases includes genetic testing, in contrast to other developed countries where testing for certain common metabolic genetic abnormalities, for example, is routinely done. More genetic tests than ever before are available in our twenty-first century. Advancement in medical technology is rapidly expanding, and some of these genetic tests can be well utilised in the

sudden, unexpected death cases of forensics. I will touch on research in relation to genetic testing in the chapter 8. In the above-mentioned study by Du Toit-Prinsloo *et al.*, only one SUDI case had genetic testing done (2013, p.348). The impact that genetic test outcomes can have on the living family members need to be considered as well. The overarching benefit of knowing that the cause of death is related to a genetic abnormality can bring immense relief to the grieving parents. Many parents want closure and have feelings of guilt over not knowing what they could have done to prevent this tragic death. Knowing it was not their fault could aid in reducing the harm. It would be ideal if genetic testing for common metabolic abnormalities could be done routinely after birth. The burden of limited resources exists long before death. This brings the state accountability into decisions regarding implementation of national primary health policies. Can such a death then be deemed as a health system failure? Of course, genetic tests and the cost implications need to be considered. Also, the amount of genetic abnormalities that are present in our population may not be known. The comparison between the cost of implementing and including genetic testing versus other ancillary investigations such as viral testing needs to be considered as well. The feasibility of doing genetic testing as compared to good histological examinations is also important. More studies are needed to ascertain the feasibility of the tests as part of a routine standardised investigation. Therefore, national protocols involving the investigation of SUDI cases need attention. Distributive justice is indeed complex, as can be seen in this discussion of economic considerations of implementation compared to impact on case finalisation and families' need for closure.

"It is, however, impossible for forensic pathologists to ignore genetic diseases among the causes of death" (Michaud *et al.*, 2009, 717). Michaud *et al.* make a strong case in their article that genetic testing, especially in sudden cardiac death, SIDS and drowning cases of young adults and children, is essential (2009). They propose a collaboration structure involving a multi-disciplinary team involving, at minimum, the family, magistrate, forensic pathologist, cardiologist, and geneticist. The problem is that in sudden death there is obviously no way of obtaining consent prior to a forensic autopsy. The only alternative is to involve the magistrate and family members in the process if it is related to research, especially if information about a genetic mutation can have implications for surviving relatives. I will not discuss the ethical challenges relating to disclosure of genetic information here. The only important comment is that the current system is already overburdened, so adding any additional responsibility for forensic pathologists must be carefully considered.

The sudden death of anyone, especially infants, is disturbing to say the least. The importance to have good institutional policies in place may alleviate some of the harm caused to surviving relatives. These policies should be regularly reviewed to determine if more can be done to aid in diagnostic and identification matters. I end this section with a good quotation in relation to research of SUDI deaths: *"It is hoped that this report will stimulate further research into SUDIs, specifically with regard to the epidemiological profile as well as the methodology of (medico-legal) investigation of SUDI in South Africa. Ideally, this should lead to the formulation and implementation of investigative protocols that can realistically be achieved and sustained in a country with limited resources. In time, such protocols and processes may be improved to the extent that standards that have been set internationally may be met. Until we know the real scope and magnitude of this problem in South Africa, SUDI/SIDS will remain a riddle within a riddle in South Africa."* (Du Toit-Prinsloo *et al.*, 2013, p.350).

7.2 Socio-economic considerations and the forensic doctor

Forensic doctor as scarce resource

The forensic doctor not only works in a resource limited setting but are themselves a scarce resource. This was alluded to in the *Towards A Safer Khayelitsha Report of the Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community of Khayelitsha* (O'Regan and Pikoli, 2014) as well. The main concern is that the overburdening of the forensic doctor, as a moral agent in and of themselves, reduces their moral decision-making capacity.

Due to South Africa's high interpersonal violence rate, as well as the large number of motor vehicle accidents, forensic doctors in South Africa have a heavy case load (Evert, 2011, p.3). The latest statistics released in February 2017 by *Statistics South Africa* for the year of 2015 stated that 11,1% of deaths were due to unnatural causes (Stats SA, 2017, p.24). This was just over 51 000 deaths due to unnatural cases for the year of 2015 (2017, p.24). These should, and presumably were, processed through the forensic pathology laboratories as per the Inquests Act. The total number of cases investigated at mortuaries is not specified in these statistics. According to a South African article related to the performance of autopsies (Lorraine and Saayman, 2012), approximately 70 000 medico legal autopsies need to be carried out yearly in South Africa. This means there are an estimated 20 000 sudden, unexpected deaths, over and above the approximately 50 000 unnatural deaths, that need to be processed in forensic mortuaries.

These statistics reveal the exceptionally high workload under which South African forensic doctors labour, as shown by the rough estimation above, and Lorraine and Saayman (2012). This was also confirmed recently in the local news again (Tswana, 2017). The Cape Argus article reiterated the increased case load at the two Cape Town metro forensic mortuaries over the past few years (Tswana, 2017). This increase in caseloads is causing strain on the forensic doctors and causing a backlog. The NAME in the United States of America (USA) recommends 250 cases per forensic doctor annually, and not more than 325 (Peterson, 2016, p.10). A more realistic South Africa target of 350 annually was mentioned, but is currently exceeded (Tswana, 2017). It is easy, depending on the forensic facility, to average as many as 400 or more cases per year. There are less than sixty qualified forensic pathologists, as well as a few hundred doctors with additional forensic training, who must conduct all medico-legal post mortems in South Africa (Saayman, 2017, p.2).

Service delivery concerns

The large burden on forensic services was highlighted when Gauteng forensic services halted autopsies and over 250 bodies were allegedly held back this year too (De Villiers, 2017a) (Raborife, 2017). The crisis revolved around forensic pathology officers - not doctors, who assisted the forensic pathologists in the performance of autopsies. Their assistance to the forensic doctors is important, given the number of autopsies that need to be carried out. Usually these forensic pathology officers 'open' the bodies, after the external examination, and eviscerate the organ blocks so the doctor can dissect these. This should always be done under the supervision of the forensic doctor. The doctor is still the one scientifically interpreting the autopsy findings and completing the autopsy report and thus ultimately responsible for the management of the case. The increased workload situation is prevalent in most provinces, this one highlighting the Gauteng province; in June 2017, De Villiers also reported similar working conditions of forensic pathology officers in the Western Cape. Again, the issue of the high workload was raised in this news article (De Villiers, 2017b). My concern does not pertain specifically to the forensic pathology officers' grievances, but to the extraordinarily high workload of forensic doctors in general, as mentioned

above too. When the forensic pathology officers strike and do not assist the doctors, this places an added burden on the forensic doctor. These recent articles illustrate how misunderstood is this field of medicine, ranging from job descriptions to laws governing the practice and even political misunderstanding and underfunding. These recent articles also show how prone forensics is to media involvement and sensationalism, especially due to the interface between law, medicine, and bereaved families. This highlights the need for accurate public information around forensics, accredited training for forensic pathology officers and specific ethical codes institutionally and nationally.

The following recent statement by forensic specialist Professor Saayman aptly summarises the current dilemma in forensics due to resource restraints mentioned above, which naturally influences the quality of services rendered: *“It would indeed be preferable or feasible for the Department of Health to employ persons who have relevant higher qualifications (such as bachelors’ degrees in biomedical sciences and/or anatomy) to render these services - if the available monetary resources would allow for that. Clearly, the cost of employing such persons with higher educational qualifications and skills would substantially impact upon the budget requirements for the forensic pathology service. Unfortunately, resource constraints in South Africa and competing needs for other health care services – such as management of infectious diseases, mother and child care, vaccination services, etc. – compete directly with fiscal allocations in this regard. In adequately resourced countries like the USA, Canada and the UK, it is possible to employ only qualified graduates to render these services – but this is probably not feasible in SA at this time.”* (Saayman, 2017, p.4).

It was good to see, in this unfolding forensic service delivery saga, that the media shed light on all different party’s perspectives. One of the above-mentioned reporters for News 24, De Villiers, echoed the statement that Saayman made on behalf of the National Forensic Pathology Service Committee in his latest report on this matter (De Villiers, 2017c). Similar references to the budgetary constraints mentioned by Professor Saayman were also quoted in De Villiers’ article. Unfortunately, the forensic debacle is not yet over; it will continue to re-surface every now and again. I will consider the influence that these conditions have on the behaviour of the forensic doctor at the end of this section.

There have been improvements in service delivery since the FPS became a health care component under the Department of Health. However, any state governed department has resource allocation constraints. Many things do still need to be improved within the forensic services, including *“the training and service conditions of forensic officers / assistants, better training of doctors, and diagnostic services such as toxicology, etc”* (Saayman, 2017, p.4).

Sudden, unexpected deaths influencing resource constraints

I will now emphasise the sudden, unexpected deaths burden on the forensic doctor and the socio-demographic impact in South Africa. A study on SUDI cases conducted in South Africa revealed that the majority (76,5%) of these infants referred to mortuaries for forensic investigation died from natural diseases (Du Toit-Prinsloo *et al.*, 2013, p.344). The findings were similar in a study conducted in a forensic laboratory on SUDA cases by Tiemensma and Burger. 79% of the sudden, unexpected deaths were found to be due to natural causes (Tiemensma and Burger, 2012, pp.90-91). Both studies clearly highlight the fact that the majority of these SUDA and SUDI cases are natural. With South Africa’s extremely high unnatural death rate, this results in an unnecessary overburdening of an already-stretched forensic service, especially in the context of a scarcity of trained personnel. I also propose that this is unethical to the deceased themselves. Seen as a percentage, almost 30% of deaths investigated in medico-legal mortuaries are natural deaths. This

obviously adds to the autopsy loads, with the added burden of potential harm to the deceased and/or surviving family. The families are also harmed, who now have delayed access to answers as to the cause of death, which could again lead to a delay in financial planning and funeral delays aggravating the whole grieving process.

In my experience, most of the sudden, unexpected death cases tend to be from lower income communities. I suspect that this is due to multiple factors such as poor access to health services and lack of transportation, as well as overburdened existing facilities with limited staff that can attend to the need of the large number of patrons (Price *et al.*, 2016). I remember one specific day working as a young community service doctor at Mitchell Plain Community Health Center (CHC) in the triage room and having to see close to 200 patients that day. These patients spilled over into triage, as they could not get access or appointments via their routine clinic system. This is not an exception to the rule, unfortunately, in the overburdened state primary health care clinics, and not conducive to accurate and timeous diagnosis in each case.

This, combined with a lack of proper information or lack of awareness of timeous medical intervention, may lead to many unnecessary deaths. Even if individuals are aware of possible health problems, the lack of immediate access to appropriate health care services is probably a barrier which leads to what is considered 'sudden, unexpected death'. A retrospective, descriptive study mentioned earlier relating to the SUDA cases over a five-year period conducted at FPS Tygerberg revealed that a high proportion of deaths related to preventable or treatable conditions such as pneumonia and pulmonary tuberculosis (PTB) (Tiemensma and Burger, 2012). The PTB prevalence in the study resulted in approximately 5.2% of female and approximately 6.6% of male SUDA cases. Pneumonia accounted for 11.9% and 5,4% of deaths in females and males respectively (Tiemensma and Burger, 2012, p.92). Neither one of these respiratory deaths should have been sudden or unexpected, and hence did not necessarily warrant a *forensic* autopsy. Tiemensma and Burger also alluded to the possibility that a lack of knowledge about the natural disease process and symptom recognition, specifically in relation to PTB, could play a role (2012, p.93).

The essential point is that a large proportion of the community could be sick and not even be aware of it. The ethical challenge of distributive justice, then, relates firstly to the overburdened and under-resourced nature of our primary healthcare system, and secondly, to the resulting inadequacy of early medical detection. Hopefully with government focusing on primary health care this will directly result in greater health service access and lead to earlier detection of disease, and even prevent premature deaths. The primary goal is prevention and cure, with the secondary benefit of fewer natural death cases being referred for forensic investigation as so-called SUDA and SUDI cases.

Unfortunately, a decline in anatomical pathology autopsies (briefly alluded to earlier) may indirectly worsen the situation. Anatomical pathology autopsies, which are done with the family's consent, confirm underlying natural disease and clarify specific natural disease diagnosis at death (Du Toit-Prinsloo and Saayman, 2012). Despite the availability of technologically advanced diagnostic tools, studies have shown that there are still major discrepancies between the cause of death diagnosed with clinical facts ascertained and the cause of death identified by autopsy (Zarbo, Baker and Howantiz, 1999). Greater recourse to anatomical autopsies to confirm cause of death may alleviate the burden of the current volumes of forensic autopsies due to the consent structure in place governing the performance of the anatomical autopsy, this would be an appropriate ethical route under the correct circumstances.

Resource limitations and the influence on the forensic doctor

Within this context of high demands and heavy workload, the forensic doctor still has the responsibility to act as a moral agent. Many decisions need to be made within the forensic sphere that can have an ethical impact on the deceased, the surviving family and other role players. Some issues pertain to retained interests the deceased have post mortem, such as upholding their bodily integrity. Other issues concern the relational connection that the living family had with the deceased. A decision made can influence post mortem harm as perceived by the family, as has already been discussed at length. My question here is, how does the overburdened forensic doctor get influenced by distributive matters?

The deceased would be worst affected in dual loyalty situations as they are unable to speak for themselves. Add into this equation the overworked forensic doctor who might be more susceptible to coercion in dual loyalty situations, adding to the vulnerability of the deceased. It is not easy to maintain high standards of morality when your resolve is low. Taking the time and effort to confront possible conflict of interest situations may be too much of an added burden. The course of least resistance is then taken, which may involve submission to coercion. When resources and personnel are stretched, the strain to maintain high standard of care and consideration of the deceased is jeopardised as well. When there is no time to contemplate ethical issues, they likely remain issues, since ethical challenges will persist. Possible post mortem harm cannot be optimally addressed either, as this will entail time taken to consult with surviving family members. It might be easier to continue with the status quo and address issues only when they arise, rather than addressing the underlying larger issues, which will alleviate the smaller issues. An example is the retention of brains. If the families are informed of this from the onset, this can alleviate possible future post mortem harm if later discovered.

7.3 Socio-economic considerations and society

Fairness in the context of forensic medicine in South Africa should result in a consistent application of standards and resources irrespective of irrelevant factors such as race, class, and socio-economic status. This means that all medico-legal investigations should be done as per national standards regardless of the socio-demographic status of the deceased. The motor vehicle accident autopsy involving the unidentified person should be the same as the autopsy of the motor vehicle accident that involved the president. It may be regarded as fair under certain circumstances to expedite the autopsy. These reasons can include religion, culture, public safety, mass disasters or high-profile cases. What constitutes high-profile cases can be debated and is not for discussion here. Unfortunately, socio-economic factors do influence the delivery of service provided, as we saw in some of the discussions above. This is one of the reasons I propose that the forensic doctor should act as a whistle-blower, in terms of reporting trends in certain communities which could in turn lead to a greater distribution in terms of justice. One such area of whistle-blowing is TB reporting, which I will discuss in detail in the next chapter. For now, I will briefly explore the impact of acting as a whistle-blower in vigilante deaths.

Whistle-blowing and vigilante deaths

The role of the forensic doctor to act as a whistle blower was confirmed in the NHA's *Regulations Regarding the Rendering of Forensic Pathology Services* (2007). Two of the services related to FPS is stated as, "collecting, reviewing and analysing related data to determine trends or prevalence of incidents of unnatural death; and providing information and advice to health or other government authorities or departments." (NHA, 2007, p.34). The wording "to determine trends" speaks of recognising patterns and mandates the reporting of these observations to the relevant

authority or department. Whistle blowing can in fact be seen as a mandate sanctioned under the NHA. I will now discuss one such a trend.

In forensics, a large number of assault cases is seen. Many of these are related to community assaults. This high rate of assault cases coincides with the recent Stats SA *Mortality and causes of death in South Africa, 2015: Findings from death notification*, it is mentioned that the assaults accounted for approximately 14,1% of all classified unnatural deaths, which is more than 7000 deaths annually (Stats SA, 2017, p.43). Sadly, over 6000 of these assaults involve males of financial-contributing ages, over 15 years old and below retirement, (Stats SA, 2017, p.46). The Western Cape, Eastern Cape and Northern Cape all had over 20% of unnatural deaths attributed to assault (Stats SA, 2017, p.48). Unfortunately, the assault cases are not further specified into other categories and the exact distribution is not known; i.e. what proportion is blunt trauma to head alone or assault to the body in general, etcetera. The specific community assault cases I wish to discuss are known as the so-called 'bundu court' cases or vigilante cases. These are cases where an individual or group of individuals take the law into their own hands by punishing a person/s without the legal authority to do so. According to the Oxford Dictionary, a "vigilante" is defined as: "A member of a self-appointed group of citizens who undertake law enforcement in their community without legal authority, typically because the legal agencies are thought to be inadequate". By this definition it is thus apparent that these deaths are due to a local community group executing justice apart from the state appointed systems, and these actions of unauthorised violence have led to death.

Usually the "community" (or a specific group in an area) is dissatisfied by the level of crime in the area and the perceived lack of local authorities to deal with it effectively. The vigilantes then accuse and detain suspects involved in suspected crimes, ranging from house breaking to rape. These allegations are often based on speculation and not facts. "Bundu courts" have been especially common in the last decade in Soweto in Gauteng, and in Khayelitsha in the Western Cape. A 2012 commission of inquiry into the police force in Khayelitsha heard a request that a specific SAPS task force be formed to deal with vigilante attacks (O'Regan and Pikoli, 2014). Professor Gobodo-Madikizela provided information of vigilantism for the commission of inquiry (O'Regan and Pikoli, 2014, p.342), since her doctoral thesis was about the psychology related to "necklace" murders in the apartheid era. The following is an example Professor Gobodo-Madikizela provides for the commission's 2014 report, one which is typical of the cases seen regularly at the Tygerberg FPS mortuary:

"The following excerpt from one of her interviews – 'Let me give you an example of what happened in my neighbourhood just this morning at 5.00am! We heard a woman screaming "i-Bag yam? I-Bag yam? Nal'isela" (My bag! My Bag! Here's a thief!!) In no time, I mean, in no time, everybody was coming out, slamming doors behind them. I mean, it was like a split second – and they were all dressed in their clothes, not pyjamas. It was as if they were waiting, ready all night for exactly this kind of thing to happen. Then they descended upon this man – they came with all sorts of weapons to assault him. Rocks on the street were thrown at him. In no time, the man was gone – in no time – they had finished him. Think about it, in a matter of a few minutes, perhaps seconds, a man is dead, killed by a group of people in my community for snatching a woman's handbag on her way to work. Glancing at his body lying on the side of the street as I went to work, I saw that a large concrete slab – you know those slabs used to divide freeway roads. A concrete slab had been thrown on the back of his head to finish him off." (O'Regan and Pikoli, 2014, p.342)

Professor Gobodo-Madikizela continued to elaborate on the similarities of these so-called vigilante attacks in the report. She said: "...there is a trigger event that mobilises the crowd, the crowd acts

spontaneously, not in a planned fashion, the violence seems irrational and disproportionate, there is no evidence of a leader, the harm is inflicted by a group of individuals, not by one or two, and very rarely does it happen that anyone tries to stop the escalating crowd action. She acknowledged that other forms of vigilante violence may also happen in Khayelitsha, with a more planned aspect.” (O’Regan and Pikoli, 2014, p.342)

At Tygerberg FPS many of these cases died due to multiple injuries, many times related to blunt injuries caused by a variety of objects of force, usually inflicted by multiple individuals in varied alleged circumstances. Some of the forensic cases encountered also had burn wounds apart from the blunt injuries, and even “necklacing”⁸, to which Professor Gobodo-Madikizela referred above.

The above-mentioned cruel murders related to vigilante attacks cannot be regarded as ‘community justice’, as no ‘justice’ towards the deceased, and their family, was really undertaken. No impartial trial was undertaken, and violent actions were only based on accusations. This also means that no one is safe from being accused and ‘sentenced’ by these vigilantes. This is unconstitutional as everyone has a right to a fair trial. No one has the right to take another person’s life, for whatever reason. It goes against the whole grain of morality. It is very easy to see why the community vigilante killings are in themselves unethical to the core.

As mentioned earlier, forensic medicine serves as a protection mechanism for the greater society in serving the purpose of justice by passing on information observed on a case by case basis. When cases are merely done for the sake of work without insight into the community dynamics at play, this is unethical. By not addressing these multiple, area-related murders the entire community is under threat for their very lives and those of their loved ones. The chance of a fair trial is severely limited. The forensic pathologist can be the voice for the deceased for a “fair trial”, even from the grave, and be able to provide some type of post mortem “justice” for the deceased and their families. I do advocate that the statistics for these vigilante murders should have been part of the commission of inquiry report of Khayelitsha by O’Regan and Pikoli (2014). Part of the report should include the number of vigilante killings seen at Tygerberg FPS and/or a forensic doctor’s opinion, as Khayelitsha is one of the areas that falls under FPS Tygerberg. This is an example where the forensic doctor could act as a whistle blower. The only mention in the above-mentioned report pertaining to forensic pathology services relates to crime scene management and autopsy practices, as well as a brief exploration of delayed and problematic toxicological and DNA analysis (2014, p.174-179).

By bringing these cases to the attention of the appropriate authorities the entire community can benefit as more safety mechanisms, such as increased police presence may then be distributed to these vigilante-prone areas. The other spin off may be that emphasis is laid on improving the delay from the time of the offence to the sentencing of criminals. The delay in the finalisation of criminal cases, results in a large number of accused persons out on bail. While awaiting sentencing they are on the streets and amongst the community and many times continue in criminal activity. This leads to dissatisfied communities and increased vigilante attacks. It is apparent to see how the forensic doctor as whistle-blower can possibly even save lives and contribute to the fair trial of the deceased.

⁸ “Necklacing” is when a car tyre is placed around the neck of an individual with a flammable substance inside which is then set alight, resulting in significant burn related injuries, especially to the upper aspects of the body and head

Organ distribution

Let me move on towards a completely different topic, namely that of organ and tissue retention and distribution in forensics. Due to the tremendous scarcity of organs, the biggest ethical issue related to organs specifically is that of distributive nature. Due to the shortage of donor organs, for transplantation as well as the use of human tissue in traditional medicinal or for occult purposes, the possibility of abuse towards the deceased exists. The deceased, especially given the lack of consent in forensics, can be exceptionally vulnerable. One recalls the unsavoury history of anatomy and how bodies were harvested when the demand from anatomy departments was high. There have been cases in the past where corneas, for example, were harvested in many forensic cases. Today the guidelines for organ transplantation, if the donor is a forensic case, are much more stringent and consent is required from the living relatives as well as permission⁹ from the forensic doctor involved.

This discussion concerning organ distribution is related to the benefit to society. Could the commercialisation of tissue/organs ever warrant strong support within forensics? Wouldn't hundreds of people benefit if the forensic teams harvest all feasible corneas and even bones? They would surely not be missed by the families. Is the benefit to greater society so considerable that routine procurement ought to take place? If one considers the tremendous advancement of medicine as a direct result of the immortal HeLa cell line, do these condone the initial method of retainment? Even if these cells would have been harvested via the "routine" paternalistic system of that time, when does the overall benefit to society outweigh individual autonomy? When, in a symmetrical manner, does the "routine" retention of tissues, legally protected in forensics, outweigh the individual's right to bodily integrity? Can the discovery of a rare cause of death warrant the automatic academic dissemination of this information, even if anonymously? What about conference discussions of interesting cases? Or the distribution of microscopic slides of tissues to colleagues at other faculties or facilities?

Indeed, there are many questions I have raised above. Unfortunately, I cannot expand on my own opinions of each of these questions. As forensic cases are in a sense covered by the umbrella of law, I do think this erroneously leads to the assumption that all practices are beyond reproach. This is indeed something that needs more thought, and much more deliberation ethically, in institutional and national forums.

I agree with the following statement by Jones *et al.* about more strenuous guidelines for larger organs and less for microscopic specimens and smaller tissue blocks. "*While respect for human material should be universal, regulations governing its retention and use should be most demanding for brains and hearts, and least demanding for tissue blocks and histological slides.*" (Jones *et al.*, 2003, p.346). This articulates the essence and is in keeping with what I mentioned in previous discussions especially in relation to post mortem harm. Larger organs tend to be related to higher likelihood of perceived post mortem harm by the relatives. Tissue and organ retention in forensic medicine should be guided to incorporate the legal aspects and national and institutional guidelines. While consideration of the distributive justice aspect of limited resources must be balanced as well, not just to the public need (such as possible routine bone harvesting), but to the benefit and advancement of academia and teaching too.

⁹ The forensic doctor needs to give permission that the requested donated organs can be harvested. The reason for this permission is bound up in the legal requirement of cause of death determination or evidence collection. An example is if specific organs are required for the autopsy, such as for the determination of the stab wound track in the thoracic cavity. This may preclude the donation of the heart or lungs. But the liver and kidneys may still be donated in this case. The permission from the forensic doctor will be on a case by case basis.

Chapter 8: Beneficence and Non-Maleficence: doing good and avoiding harm

Both principles of beneficence and non-maleficence are related to harm. In short, beneficence is doing good and non-maleficence is avoiding harming. Accordingly, the concept of beneficence is rooted in a positive activity towards another, such as an act of service, charity, friendship, goodness, or kindness (Beauchamp and Childress, 2013, p.202; ed. Moodley, 2011, p.57). Non-maleficence is grounded in the concept of *primum non nocere*, i.e. first do no harm. Where beneficence requires a virtuous act towards someone else, non-maleficence is the avoidance of a negative action (Beauchamp and Childress, 2013, p.150; ed. Moodley, 2011, p.63). “*Principles of beneficence potentially demand more than the principle of nonmaleficence, because agents must take positive steps to help others, not merely refrain from harmful acts.*” (Beauchamp and Childress, 2013, p.202).

With the definitions above in mind I have attempted to look at the field of forensic medicine by grouping the relevant ethical issues in terms of doing good or avoiding harm. This simplified way of looking at an ethical issue may assist in discerning the core matter. The following discussion is my attempt to do just this, whilst also utilising these two principles as part of a framework of principlism in exploring ethics in the forensic medicine field.

8.1 Doing good:

In earlier chapters, I noted the complexity of the forensic medicine field about the number of stakeholders involved per case. Many more than in any routine doctor-patient relationships usually encountered. A simple case at the very minimum involves the deceased, the deceased’s family, the forensic physician, the police investigating team, undertakers, other forensic personnel and possibly a legal team.

The Oxford Handbook of Forensic Medicine succinctly defines the forensic medicine field as “*incorporating those areas of medicine which interact with the law or legal process*” (2011, p.2). In chapter 5 I addressed the South African legal requirements for forensic medicine in relation to Acts governing the field.

I mention some of the role players again as I suggest that there may be grounds to incorporate the principle of doing good, as far as possible, for these role players in forensics. In other words, it is worth thinking through the dilemma of who is affected and what constitutes the most benevolent way forward. The forensic doctor as a moral agent is central to this discussion. The doctor can act in a benevolent manner towards these role players. An example of acting benevolently towards the deceased as a moral patient, with moral standing, can be by upholding the interest of bodily integrity or right to identification in unknown cases, and by reporting on the accurate cause of death as a retained interest. Another example where the forensic doctor can act benevolently is towards the police and judicial system, by providing timeous autopsy reports and giving expert testimony in court in an objective, scientific and professional manner. I will focus the discussion on the forensic doctor as a moral agent doing good towards the deceased and doing good towards the greater society.

8.1.1 Doing good towards the deceased

Dignity and bodily integrity

As I mentioned in chapter 3, the deceased as a moral agent, has a retained interest in having their bodily integrity upheld. This bodily integrity is closely tied to the previous embodied person that the deceased was. This of course is linked to the retained interest in identity as well. Why do I mention

this again here? Because the retained interests of the deceased are in fact also linked to the relational connection that remains between the deceased and the living family. Therefore, the forensic doctor, acting benevolently upholds these interests. The interest of bodily integrity is closely connected to upholding the dignity of the deceased.

Dignity is argued as a fundamental right that can persist after death (Christison and Hoctor, 2007, p.35). Protection of human dignity is foundational to our Constitution, as I have already noted in earlier chapters. Christison and Hoctor, as South African authors within the South African legal framework, explain in legal detail that dignity remains beyond death, and an outflow of this concept of “*dignitas*” is respect for bodily integrity (2007, pp.34-36). They further state that “*under the Constitution, given the rights to dignity and privacy enshrined in the Bill of Rights...it is implicit in the Constitution that society has an interest in protecting the dignity of the dead.*” (2007, p.41) Hermann (2011) expresses similar sentiments, as do McGuire *et al.* (2010). It is very clear from the above quotation that when I bestow dignity upon the deceased, I will be more likely to act in a benevolent way towards the body of the deceased and uphold the bodily integrity.

Even the *National code of guidelines for forensic pathology practice in South Africa* state that “*all procedures and body manipulations must be performed within a framework of dignity and care for the deceased.*” (2007, s.68, p.14). From these references dignity towards the dead then involves the extreme of not mutilating the body, as Christison and Hoctor emphasize (2007, p.31), but also dissecting the corpse in a way that maintains integrity by using standardised international dissection techniques.

Bodily integrity and post mortem harm

A large part of my discussion surrounding the moral status of the deceased was around the concept of post mortem harm, secondary to the ante mortem relationships the deceased had. A forensic medicine autopsy is sanctioned and protected by law, as we saw in Chapter 5. Therefore, no consent is needed to proceed with the forensic autopsy. We also saw that all necessary specimens taken during the autopsy, such as to determine cause of death, are also protected by law. This means that anything from small tissue specimens for microscopic examination, to larger emotive organs such as hearts and brains, may be retained at the discretion of the forensic doctor as per the Inquest Act of 1958 (Union Gazette Extraordinary, 1959, s.3, p.36) and the National Code of Guidelines for Forensic Pathology Practice in South Africa (2007, pp.14,18,19). Due to the deceased’s cultural background and religious beliefs, removing organs could be regarded as violating bodily integrity. This was apparent in the Alder Hey and Green Lane Hospital cases (Arcus and Kessel, 2002, p.1493; Burton and Wells, 2001; Evans, 2001, p.825; Jones, 2011, p.20; Jones, Gear and Galvin, 2003, p.346; Skegg, 2003, pp.425-426; Tomasini, 2009; Wilkinson, 2002, pp.31-32). Also, the case of the Orthodox Jewish woman who died in a car accident in New York (to which I referred in Chapter 2) demonstrated how the family perceived harm if the bodily integrity was not upheld, as would have been the case with an autopsy (Nelkin and Andrews, 1998, p.287).

It was clearly demonstrated in the above articles that the parents and other living relatives experienced harm when they realised what had happened, more so when emotive organs were kept without consent. Smaller tissue samples, in most cases it would seem, did not evoke the same eruption of emotions (Jones, Gear and Galvin, 2003, p.346), although the retained HeLa cells also evoked post mortem harm (Skloot,2010). Did the fact that they were not informed lessen the harm experienced in the end? I think not. Even though, from a legal perspective, the pathologists did not act illegally or even maliciously, it still had a major impact (Evans, 2001, p.824; Jones, 2011, p.20; Skegg, 2003; Tomasini, 2009, p.442). Although parental consent was not required, the option to object to the retention should have been brought under their attention. The

forensic matter of keeping larger organs, has the same potential for post mortem harm as in the Alder Hey cases and can be a potential ethical dilemma, especially in our culturally and religiously diverse nation. How can I, as the forensic doctor, act benevolently towards the deceased yet still fulfil the requirements of law? I would suggest that the retention of larger organs must occur only if essential to the legal case or diagnosis, and if retention is necessary, to have an institutional system in place to inform the family at the very least. Having protocols in place to be able to return such organs to family, if religiously and culturally significant, when these organs are no longer deemed necessary for the forensic investigation is also an important consideration and would be the benevolent action to undertake. I will refer to this again in my concluding chapter as it is particularly relevant to future considerations within forensic medicine.

8.1.2 Doing good towards society

I chose the greater society as this specific role “player”, so to speak, as I do think it is the one that is easily dismissed or forgotten in the forensic sphere. We are all connected to a larger society within a country. Forensic doctors have a front row seat to many important cases which shape history. By acting as moral agents, forensic doctors could create heightened awareness of ethical issues prevalent in society, which death has a way of unmasking. We can think of previous historical events, such as the assassination of President Verwoerd and the custodial death of Steve Biko, to the more recent tragedies of Anene Booysen and Anni Dewani, all of which give us insight into underlying tensions and problems within South African society. Then there are the important community cases as well, like the deaths resulting from circumcision rituals and vigilantism, to mention but two.

Our South African society is not only violent, but many are also still dying from treatable diseases as well. One of these is the notifiable disease TB. Many PTB cases, if not treated effectively, can lead to disseminated TB and death, which is why TB is a notifiable disease; it can be effectively treated, and serious forms of the disease curbed if diagnosed early. The study by Tiemensma and Burger showed that many SUDA cases are still related to TB (2012). In the National Code of Guidelines for Forensic Pathology Practice in South Africa, Annexure 2 contains the notifiable medical conditions (2007, pp.63-66). In sudden, unexpected death cases where the diagnosis is that of TB, this is of course reflected on the death certificate, and in turn reflected within national statistics. These figures, along with the disease notification statistics, are very important for the government in terms of planning for macro and micro allocation of treasury funds. It is also important to know as accurately as possible the prevalence of a disease such as TB in this country, as it is currently an epidemic and millions of rands are already spent on the diagnosis and treatment thereof. It is also important locally and nationally to recognise when certain diseases are not well controlled or declining in prevalence.

Globally, the CDC estimates that around a third of the entire world’s population is infected with TB (inactive). They estimate that over 10 million people will fall ill because of active TB disease, and approximately 1,8 million people still die because of TB (CDC factsheet, 2016). As we know in South Africa, TB remains the leading natural cause of death. The latest statistics released by Stats SA in February of this year, 2017, ranked TB in the top position of natural deaths still (Stat SA, 2017). Over 33 000 people died from TB in South Africa in 2015 (Stats SA, 2017, pp.31–32). This equates to about 90 people daily! We are also sitting on a MDR and XDR TB crisis that has not been fully comprehended yet. A recent international article that estimated the future burden of MDR and XDR with mathematical modelling was published in *The Lancet Infectious Diseases* recently (Sharma *et al.*, 2017). This study by the authors highlighted how the disease was contracted. They also emphasised the prevention of the spread of the resistant strains in these household contacts, as well as more effective diagnostic markers to detect the resistant strains

more efficiently (Sharma *et al.*, 2017). What was especially relevant was that South Africa was one of the countries that was also used in the analysis of this mathematical modelling. The Stats SA report of 2015 also showed a high number of deaths attributed to MDR and XDR TB: “*Of the main [reasons] due to natural causes..., certain infections and parasitic diseases comprising 19,5% of all deaths was the most common main group of causes of death in 2015. Included also in this group were 1 115 deaths due to multidrug-resistant tuberculosis (MDR-TB) and 162 deaths due to extensively drug-resistant tuberculosis (XDR-TB)*” (2017, p.21). These statistics may be skewed if diagnostic testing for resistant strains is not performed on the SUDA TB cases.

Regarding doing good to society, forensic doctors can be watch dogs. What I mean by this is that more in-depth reporting of TB is necessary than is currently happening on the forensic medicine front. The act of beneficence towards society would be the taking of measures to improve reporting of TB cases in the forensic medicine sphere. Let me use an example. Due to the increased burden of MDR and XDR TB, globally estimated to be at 500 000 cases and rising rapidly (Sharma *et al.*, 2017; CDC factsheet, 2016), I believe it is important for additional diagnostic testing to be done on lung tissue specimens and/or fluid to determine if the TB present in any SUDA cases, for example, are drug resistant variants. This could be invaluable information for TB surveillance programs and prevention, as most of these deceased were living within a community for which they were then a contact for this disease, yet unaware themselves of the underlying TB, even drug resistant forms. Another act of reporting TB in forensic medicine is in an unnatural case, where the cause of death is obviously unnatural, such as a stab wound to the chest, but the lungs have caseating necrosis present, highly suggestive of pulmonary TB. The reporting here is even more important, as these are all potentially unknown contacts. To do less than being a watch dog, I propose, is unethical, and not acting benevolently towards the greater society.

It is my experience there is an under-notifying of TB cases in the case of unnatural deaths. I know that in some of the unnatural deaths cases that I had managed, TB was present as well. The unique forensic situation is that the cause of death was obviously due to a stab wound or motor vehicle accident, for example, but these obvious TB cases were also not reported as such on the death certificate, as it was not related to the primary cause of death and neither was it contributory to the death. Notifiable disease forms for TB are rarely completed, as far as I recall, in these unnatural cases. Unfortunately, this is the rule, not the exception. I have since asked numerous of my colleagues and all confirm this. The impact of withholding this information from the household, especially if there were children under 5 (which are the most susceptible, with worst outcomes) is not just unethical, it is tragic. I will mention more about this in my concluding chapter, where I suggest future recommendations.

8.2 Avoiding harm

Beneficence and the positive action required towards the deceased and South African society were discussed above. Continuing to non-maleficence, the focus will be on the avoidance of harm. Avoiding harm can mean the following: not inflicting pain or suffering, not killing, not causing offense, and not depriving or debilitating someone (Beauchamp and Childress, 2013, p.151; ed. Moodley, 2011, 63). These are based on preventing and evading a negative entity. The important consideration from a moral point is the recipient of the harm. Obviously, as I explained specifically in chapter 2, the deceased cannot be directly harmed in the sense of feeling pain or suffering. Harm is possible in terms of the deceased’s reputation or even ante mortem anticipatory harm. The most important recipients of harm in relation to the deceased are the relatives. Due to the relational link between the deceased and the living family, an unseen bond continues after demise. The physical relationship may cease, but the emotional bond and memories are still very real. Therefore, post mortem harm as a concept is significant for this thesis.

An example demonstrating where non-maleficence is important to consider is the rehearsing and practicing of medical techniques on the deceased. Mostly this circumstance arises in the immediate stages after demise, such as in an emergency health care setting where a student wants to try the intubation technique in the newly demised.¹⁰ Jones, Laurence and McCullough wrote an article about this very matter (2011). They state: “*Practicing procedures on the newly dead without authorization teaches trainees to put their own self-interest first, rather than their obligations to the patient’s families.*” (2011, p. 880). They also rightly mention that post mortem student practice, such as intubation, could influence the cause the death determination. This is because all tubes, and other medical devices attached to the body, should be sent with the corpse to the mortuary if an autopsy is required. I can only imagine the student practicing intubating; with the tip of the endo-tracheal (ET) tube in the oesophagus. The forensic doctor then locates the wrongly placed ET tube and erroneously deducts that it happened ante mortem and is thus a contributing factor in the cause of death. This is a good example of why this harm should be avoided in the first place to act non-maleficently.

I will now discuss three areas which require an avoidance focus from the forensic doctor as a moral agent, and so acting non-maleficently. The first area I will discuss is related to situations of dual loyalties. Thereafter I will look at research in relation to the deceased. Lastly, I will mention the media’s influence and forensic medicine.

8.2.1 Avoiding harm in dual loyalty cases

Dual loyalty situations are always difficult as they infringe on the neutrality of forensic doctors, who “*need to conduct themselves in ways that do not infringe neutrality and independence and therefore impartiality.*” (De La Grandmaison *et al.*, 2006, p.210). We saw in earlier chapters, that when there are dual loyalties, there is always a third party involved. During the International Criminal Tribunal in Yugoslavia the investigation of mass graves during war crimes committed was required. Some pathologists were affiliated with human rights organisations, and these organisations were not necessarily neutral (De La Grandmaison, 2006, pp.210-211). The pressure to be persuaded by these affiliated organisations can result in dual loyalty situations. Many human rights organisations have unequivocal views about human rights abuses; although rightly so, these views may tint the glasses, so to speak, with which the forensic doctor then views a body from the mass graves.

An example may be where a fracture occurred post mortem when the body was being placed into the grave. This post mortem fracture may be determined to be caused ante mortem if scrutiny and objectivity are not used. This, of course, can lead to overstating injuries, instead of an accurate depiction of true injuries, which can lead to harsher sentencing of perpetrators.

The forensic doctor should be objective and not subjective. The Biko case clearly demonstrated the issues of dual loyalty. The contributing factor to the cause of death was underplayed significantly. Another example of dual loyalty which I considered were death-in-custody cases. These deaths are possible conflict of interest situations as the forensic doctor, correctional services officers and police are all working for the state. This is a possible situation where harm needs to be avoided as state biases can easily influence the parties involved (Tarboda and Arboleda-Flòrez, 1999; Thomsen, 2000; Pont *et al.*, 2012). Thomsen continues to explain that dual loyalty in cases

¹⁰ Practicing medical techniques is an essential component of teaching in medicine schools. Many medical schools have skills centres where students practice on simulated models. Practising certain techniques on patients may pose a risk in a living patient. This may be why intubation in the newly demised patient is argued to be as close to reality as possible, without the possibility of mortal danger or other consequences.

such as torture may lead the pathologist to put a natural cause of death on the death certificate, such as a lung infection, whilst not mentioning the broken ribs (caused by abuse) that directly contributed to the infection (2000, p.569). As was emphasized previously, the best way to avoid harm is to always tell the truth; *veritatem dicere* (Tarboda and Arboleda-Flòrez, 1999, p.196; Matejić and Otasević, 2010, p.775).

A very good example of where the non-maleficent principle is already in use is with the IPID Act, which I discussed in chapter 5. Pont *et al.* note that assigning different roles aid in reducing the conflicts caused by dual loyalty in the prison health care system (2012, p.478). This is noted in South African death-in-custody cases that need to be investigated by IPID (as explained in Chapter 5). This mechanism is one of the ways in which the state tries to establish neutrality. Although not perfect, it is a step in the right direction since the intent of avoiding harm can be clearly seen. The risk of all parties working within the state sector being influenced is slightly reduced as the different role players can be placed under different departments within the state. The forensic doctors being placed under the Department of Health, away from the same department as the SAPS, was a step in the right direction, I believe.

8.2.2 Avoiding harm in research of the deceased

Post mortem harm and research

Human history is full of examples where research caused harm. The World War II experiments and the Tuskegee syphilis research from 1932 to 1972 are but two widely known examples in the twentieth century. Unethical research is not just associated with the living, but also with the dead. The case I want to highlight is also linked to forensics. In Nelkin and Andrews' thorough article exploring research on the dead (1998), a case involving an infant named Christina Arnaud was mentioned (1998, p.281). Christina had died in her sleep and was classified as a Sudden Infant Death Syndrome (SIDS) case. At the time of Christina's death, a Louisiana forensic pathologist was conducting a study to determine the extent of head injuries caused when an infant is dropped. He and a colleague had disagreed over accidental versus intentional injuries in a previous case of his. The research he was conducting involved taking an infant by their feet and dropping them head first onto a concrete floor; thereafter he did x-rays and recorded the findings, before starting with the actual autopsy. Christina's body was one of the infant bodies used in this research. Obviously, the grieved Arnaud parents were harmed significantly when they discovered what had taken place. This resulted in a court case.

Acting non-maliciously towards the deceased in research should incorporate structures that involve planned research being cleared by an ethics committee, at the very minimum. Given that law governs forensic autopsies, and not consent, this becomes even more important. The post mortem harm that ensues from unethical research can be devastating, such as in Christina Arnaud's case, and should be avoided.

Albert Einstein died of a ruptured abdominal aortic aneurysm (a natural cause of death) in 1955. A controversy later arose as his entire brain was not cremated with his body, as his family assumed, but kept for possible research by the pathologist Dr Thomas Harvey, who had known Einstein years prior to Einstein's demise (Nelkin and Andrews, 1998, pp.266-268). Einstein did not formally consent, while alive, to have his body, or brain for that matter, to be kept for research after his death by Harvey or anyone else (Nelkin and Andrews, 1998, pp.266-268, p.281). The issue of consent will be discussed in more detail in the next chapter. For now, it is important to note that in Einstein's case the non-maleficent course, namely to avoid harm towards Einstein's family, would have been to not keep the brain for potential unidentified and non-authorized research. If the

pathologist had wanted to do research on the brain he should have asked permission, either from Einstein himself or from his family after his demise and prior to his autopsy. That would have been avoiding harm.

Genetic testing and research

The world of medicine is vastly expanding with more genetic tests available than ever before. The second discussion topic of research on the deceased revolves around genetic testing. Some of the genetic tests can be put to good use in the forensic medicine cases of sudden unexpected death. An example is to routinely incorporate genetic testing for certain common metabolic genetic abnormalities that may be a cause of death, such as in SUDI cases. This is not currently done in South Africa due to resource constraints, as was briefly mentioned in chapter 7. What if new genetic tests are potentially available to establish, with more clarity, the cause of death determination, but still require further research? The impact that genetic test outcomes can have on the living family members needs to be considered as well. Nelkin and Andrews mention that another researcher conducted tests on some of Einstein's brain tissue to try and determine if he had a mutation towards aneurysms and "*findings could have led to genetic discrimination against Einstein's surviving relatives*" (1998, p.281).

"*The legal and ethical aspects of genetic analyses in post-mortem investigation are complex, especially in a forensic context*" (Michaud *et al.*, 2009, p.713). At the time that Michaud *et al.*'s article was written; a new law had not yet been adopted in Switzerland that related to genetic testing and research. This is the situation in which we currently find ourselves in South Africa. In some sudden unexpected death cases, the cause of death cannot be found by simply performing the standard forensic autopsy and its ancillary investigations, such as microscopic examination. "*It is, however, impossible for forensic pathologists to ignore genetic diseases among the causes of death*" (Michaud *et al.*, 2009, 717). Michaud *et al.* make a strong case that genetic testing is essential, especially in sudden cardiac death, SIDS and drowning cases of young adults and children (2009). They propose a collaborating structure involving a multi-disciplinary team, which at minimum includes the family, magistrate, forensic pathologist, cardiologist, and geneticist. The problem is that in sudden death there is obviously no way of obtaining consent prior to a forensic autopsy. The only alternative is to involve the magistrate and family members in the process if it is related to research, especially if this information about a genetic mutation can have implications for the living family. Herein lies the concept of avoiding of harm. Future advances in genetic tests and more cost-effective tests over time brings into play the importance and possibility to do retrospective analyses on tissues preserved (Michaud *et al.*, 2009, p.717). This type of research on tissue samples kept in sudden death cases in forensics is a big possibility in South Africa as well. Our institutional and legal structures have not yet incorporated this type of research in our current law or forensic practices. If we are to reduce the harm towards the family, it is key that we incorporate this in future policies and protocols of forensic departments. The quotation below from The United Nations Educational, Scientific and Cultural Organization's (UNESCO) *International Declaration on Human Genetic Data* touches on research as well, and can be used as a summarising guideline whenever considering research on the deceased: "*The aims of this Declaration are: to ensure the respect of human dignity and protection of human rights and fundamental freedoms in the collection, processing, use and storage of human genetic data... in keeping with the requirements of equality, justice and solidarity, while giving due consideration to freedom of thought and expression, including freedom of research; to set out the principles which should guide States in the formulation of their legislation and their policies on these issues; and to form the basis for guidelines of good practices in these areas for the institutions and individuals concerned.*" (2004, p.6)

Article 12 of UNESCO's declaration addresses the forensic scope of genetic data and identity, which specifies that it should be undertaken in accordance to the legal system of each country (2004, p.10). If these are lacking, then reliance on international guidelines is paramount.

Research on stored tissue

Another aspect of research on the deceased pertains to secondary uses of biological material. What I mean by secondary uses is that the original purpose of obtaining material, such as DNA for identification purposes, is completed, and the stored DNA sample can be used again for other, unrelated, research. Knoppers *et al.* specifically ask this question pertaining to secondary research in relation to mass disaster biological material (2006). This article provides a very interesting perspective for the forensic sphere, as mass disasters directly pertain to unnatural deaths. The authors concluded that two types of research on the deceased's biological material may be warranted, within the legal frameworks of different countries, of course, to be undertaken on the deceased's biological material. The first relates to research regarding improved DNA identification techniques on anonymised samples, and the second to public safety as related to a mass fatality due to a dangerous pathogen or environmental contaminant (Knoppers *et al.*, 2006, p.362).

In keeping with the above-quoted declaration by UNESCO (2004), Knoppers *et al.* provide what I feel is a good approach to any other research on biological material of the deceased: "*no further research be undertaken without an explicit, written consent...ethical review would need to determine whether the harm caused through the act of re-contacting living relatives (e.g. invasion of privacy, rekindled grief) outweighs intended scientific benefits or even social benefits to the relatives (recognition of altruism, social utility etc.) before such research is undertaken.*" (Knoppers *et al.*, 2006, p.362).

The case of Henrietta Lacks has pertinence for this discussion on post mortem research. Although it is unclear exactly how much research has been conducted on the HeLa 'immortal' cell line, what is clear is that these cells have indeed become a research commodity, no longer linked to the person who was Henrietta. I could write a whole chapter just on Henrietta Lacks as her case has multiple ethical avenues to pursue. Do the numerous advances in science and medicine, due to research on the HeLa cells, warrant the initial taking of these cancerous cells, without consent, for research? When research is conducted on biological samples of the deceased, does societal beneficence outweigh avoiding harm in the deceased and their living relatives? I am not sure where one would feel comfortable drawing the line about which research is warranted due to greater utility. This has the potential to become a slippery slope, especially if utility is not balanced with an individual's autonomy. Finding this balance with regard to the deceased is difficult, if not impossible. One cannot avoid harm if one does not consider that it exists in the first place. Perhaps this is the best way to start with the deceased; i.e. acknowledging from the outset the harm that potentially exists, and then putting measures in place that try to avoid that harm. This may have been as simple as to inform the family of Henrietta after the immortal cell line was growing rapidly, and at that stage to get consent for further related research. I admit it is easy to retrospectively say what ought to have been done. At that stage in the paternalistic system of that day, it was not perceived as maliciously or intentionally causing harm. Looking back at historical mistakes and learning from them avoids similar avenues of harm in future research.

8.2.3 Avoiding harm: the media and the deceased

The media's influence in forensics

I earlier alluded to the case of Albert Einstein's brain being kept post mortem for research. The harm caused to the family, when they discovered that his brain had not been cremated with the

rest of his body, was clear (Nelkin and Andrews, 1998, p.266). Why is this important to discuss? Because the forensic doctor is one of the potential sources of information that the media consults. Source This information is recorded in autopsy reports and given in expert testimonies in court. The way the media portrays this information can be harmful to the reputation of the deceased and cause significant post mortem harm. The concern in view here is the deceased's interest in confidentiality. I will illustrate this by reference to various cases below.

Foltyn wrote an article that articulated the current culture's obsession with death, even more so if the deceased was famous and dies unnaturally, and forensic doctors are then involved: "*There is a mass market for morbid images of the real and simulated dead and this tells us much about who we are as a people.*" (Foltyn, 2008, p.169). The media also thrives on sensationalism. Further, forensic deaths also highlight people's uncertainty about their own unknown time and manner of demise; the only certainty in life is that everyone will die. This fascination with the unknown in relation to death was alluded to in Miah's discussion of the underlying ethics pertaining to Gunter von Hagens' international Body Worlds exhibitions and public autopsies (2004). Where does forensics feature? Due to all the media coverage of high profile cases, the forensic doctor in the court room is placed under scrutiny, not only for the sake of the accused and the deceased, but unfortunately for the public at large as well.

Miah commented on the televised public autopsy that Von Hagens performed that "*people are not watching out of an interest in engaging with broad philosophical concepts about being human...what they are really attracted by is the spectacle of real bodies*" (2004, pp.578-579). I suspect that a similar underlying morbid fascination is at work when the deceased's forensic medicine case is publicly broadcast. The public is not always interested in the "*right to a fair trial*" or in the functioning of the justice system. If the general trial process was completely fair in all cases, then all cases would have similar legal representation. But this is not the case, as I will briefly mention below. The idea of expert witness "shopping" was noted earlier in the thesis. This brings the dual loyalty associated with being an expert witness under strain, as money is a powerful persuasion force from the party that paid for the testimony. This was already highlighted in 1991 at a panel discussion of IAFS (Carol, Henderson, and Garcia, 1991, pp.163-166). If this topic of the expert witness was already relevant in 1991, then how much more so in our current day and age of advanced technologies, and where the gap between the knowledge of the layman and the expert is rapidly expanding.

Upholding confidentiality

The media's unavoidable presence and influence will continue. Let's look now at the potential harm media involvement may cause, before discussing how this harm may be avoided. As I mentioned in the beginning of this thesis, the death of a loved grief or shock usually accompanies one, or both to some extent, especially if the death was unexpected. Emotions are compounded if the demise is of a traumatic nature. It is obvious, then, how the media, in whatever form, can exacerbate the situation. The media can have a very intrusive effect into the privacy of people's lives. For example, when the French President Francois Mitterrand died, a book was published immediately thereafter by his former physician of thirteen years, with intimate details about his health and life (Herrmann, 2011, p. 280). It is this intrusion into the sphere of privacy that I propose is the main factor that can cause immense harm to the family and deceased. Even to the deceased, yes, as the media's portrayal of their death, or reflection in death of the life lived, can be damaging. An autopsy is, in a sense, the great revealer of the hidden and unknown. It has the potential to detect details about narcotic use, for example, or to diagnose vast spectrums of natural diseases that still have stigmas attached, such as HIV. Autopsies could trace DNA from intimate areas, such as sperm, which can be revealing of even the most intimate and private areas of lives. It could also

unmask an unknown pregnancy. It is apparent to see under these revealing circumstances the deceased's former reputation can be scarred. The media's revelation of autopsy details can taint the way people view a person and therein lies direct harm to the deceased themselves and/or the living.

Where does the avoiding of harm come in, in relation to forensics and the media then? I propose that acting non-maleficently with regards to media influence incorporates the entire forensic autopsy process, from the initial death scene to the court case.

Upholding dignity

Similar to the Gladiatorial arenas of death, I saw the obsessive, inquisitive nature of humanity every time I had to attend a death scene investigation. The local tabloids arrived on the scene long before I was even aware of the case. The gawking public had to be cordoned off, so the scene did not become a public spectacle. Avoiding potential harm by securing the environment is very important, even if it means putting up linen on washing lines to limit both access and viewing of the body by the public. It also means that police photographers are not to give out photographs taken to the media. It could further mean being sensitive in the displaying of death scene photos in courts in our open justice system. No one wants to see the picture of their loved one lying in a field surrounded by a pool of blood on the frontpage of a newspaper or on television. Obviously, crime scene pictures are important in a trial, but equally important is the sensitive handling of pictures as well. The harm is not limited to pictures alone: graphic descriptions in the media in an insensitive manner can also cause pain.

Respecting confidential information

Avoiding harm, then, persists throughout the technical handling of the autopsy, as well as decisions as to what special tests/examinations need to be included, such as an HIV or narcotic tests. It is understandable what effect the knowledge of an underlying HIV infection can have if the media is informed and this is then publicised. This could have far reaching influence on the financial policies of the deceased, and to the reputation, for example, of a well-known actor or clergyman or person in society. Avoiding harm then could mean, during an unnatural autopsy, to not routinely do the HIV test, as this information may not yield any relevance as to the cause of death determination but could potentially cause stigma if revealed. A similar instance is the harm that can be caused if drug screening is performed routinely and a positive result leaked to the media.

An example that comes to mind is that of Diana, Princess of Wales's death and the ensuing obsession of the media to find out if the autopsy revealed a pregnancy. This is private information of an autopsy that should not be made public. This information also has nothing to do with the cause of death in her case. Harm can also be caused if the autopsy report and pictures therein are presented in the media. A newspaper, The Orlando Sentinel, requested the autopsy photographs when the racing-car driver Dale Earnhardt died in a racing-car crash. The widow of the deceased contested this request, for obvious reasons. This case illustrates the "*controversy about whether autopsy photographs could be released to the public over familial pleas for privacy*" (Mathews and Martinho, 2012, p.721). Forensic doctors should always be wary to speak to the media, especially before the case has been finalised.

The limits of what can be published are not easy to control. The role the forensic doctor can have is to not reveal any information to the media prior to the court case. The case remains *sub judice*¹¹,

¹¹ Sub judice – under judicial consideration and therefore prohibited from public discussion elsewhere.

until such a time as the case has been finalised. It may even mean getting permission from the magistrate before certain facts can be revealed to even the family. This needs to be done on a case by case basis, with sensitivity. When these very intimate facts are revealed in a callous or sensationalist manner to the public, whether it be through court cases or earlier leaks to the public, the harm done is evident. This is where acting in a non-maleficent manner is also important.

Dual loyalty in court

The final avoidance of harm is truthfully testifying in court, if required. The forensic doctor who is called to be an expert witness should, as priority, give the court an objective opinion within the field of expertise. The court, especially in high profile criminal cases, is not a place for the ego of the testifier to be upheld, but rather the truth: *veritatem dicere* (Tarboda and Arboleda-Flòrez, 1999, p.196; Matejić, S., Otasević, 2010, p.775; Dada and McQuoid-Mason, 2006, p.59). Many authors emphasise the role the forensic pathologist plays as an expert witness in courts in primarily aiding the judge to understand the more scientific and forensic-specific details of the case (Iacobucci and Hamilton, 2010; Matejić, S., Otasević, 2010; Walsh, 2004; Carol, Henderson, and Garcia, 1991). “*The overriding duty of any expert witness is to assist the court by providing impartial testimony, regardless of who retained the witness.*” (Iacobucci and Hamilton, 2010, p.56). This sentiment is echoed by Dada and McQuoid-Mason: “*The function of an expert witness is to make complex scientific principles understandable to lay people...he or she is required to assist the court by presenting the evidence objectively, not taking sides with one or other party.*” (2006, p.59).

The sad case of Sally Clark comes to mind. Sally Clark was convicted of murdering her second child, based on expert testimony the court accepted. The pathologist erroneously gave miscalculated statistical evidence related to the prevalence of a second infant dying of SIDS in the same household (Coghlan, 2005; Bacon, 2003). She was later acquitted after serving 3 years in prison, having experienced the trauma and harm of losing two children to SIDS as well as being erroneously convicted. This is a stark reminder of the influence expert witnesses can have in courts. Even more so in a media-saturated culture, where the media are quick to give the public what they want and determine guilt or lack thereof, long before the judge has made the verdict. “*Wrong conclusions in either direction may be disastrous: failure to detect maltreatment can result in the death of another child, while unjustified prosecution can wreck a life and a family.*” (Bacon, 2003)

Any court case, especially high-profile cases, can cause significant post mortem harm to the family. This was obvious in the live media broadcast of the Oscar Pistorius murder trial in 2014, in which Pistorius was accused of murdering his girlfriend, Reeva Steenkamp. The debate as to what is and is not open justice, and what the public can have access to via the media, was showcased to the extreme in this high-profile court case. The problem with the media was fuelled in part by our new post-apartheid democracy, which here boiled down to the public feeling they are “*entitled to have access to the courts and to the obtain information pertaining to them*” (Bester, 2016). Was allowing the media full access, with broadcasting, in this unprecedented courtroom case really in the name of justice and the public’s best interest? I think it undermined the dignity of not only the deceased Reeva, but also of the accused.

The main risks of media involvement, such as with the Pistorius trial, include “*inaccurate or sensationalized reporting or intimidation of witnesses*” (Bester, 2016). Bester remarked in her article that this balancing act between the freedom of speech by the media and the right to a fair trial (both enshrined in The Constitution) was not maintained in his trial. Under media scrutiny,

testimonies can be inhibited and the media tips the scale in its own favour (2016). The harm that the media influence caused to the families involved in the Pistorius trial, both the victim and the accused's, was evident. One of the forensic pathologists who testified, Professor Saayman, requested that his statement about the autopsy details not be broadcast to uphold the dignity of the deceased. I won't go into detail about the debate surrounding his request, but this is a glimpse into the role a forensic doctor can have as an expert witness to try and reduce harm as far as possible.

The fascination about the Oscar Pistorius case, and the media involvement in all cases actually, can be summarised as follows: *"How much of this detail do audiences want? Was the release of all the gory details, evidence etc. really necessary? They were far beyond providing what people needed: the levels of interest shown in this story were sustained by sheer drama and the celebrity status of the protagonist. The best worldwide circus by far."* (Bester, 2016).

If this was a case of so called 'justice', why do not all court cases get the same amount of media interest? Even the Dewani case, where England was so unsure if South Africa could reach a just verdict concerning Anni's murder, would have been far more suitable to be broadcast worldwide. Yet it was not. Would anyone set aside the time to attend the court case of an unknown victim or accused? No. I have testified in numerous cases, some as horrific. Some involved unknown innocent children, never even given a second thought. This is sad indeed and proves that the media is mostly not interested in informing the public, but probably more in creating and sustaining sensation. This point also illustrates how important it is for the forensic expert to testify accurately in each case to the best of their ability. The same level of respect and upholding the deceased's dignity and right to a fair trial should be given to the John Doe as to John Denver. The forensic doctor, acting non-maleficently, should treat all cases with equality and unbiasedness, and be unpersuaded by dual loyalties or public opinion. This is difficult, but a moral contribution to the deceased as a moral agent, and to the involved families.

The media is here to stay. To be ignorant of it is unwise. This has led to a society that is so saturated by news that it must be evermore bizarre and surreal for a dulled society to notice. Unfortunately, the forensic doctor is not in control of everything the media publicizes; but they can control their own conduct and what they say to the media. What a privilege and responsibility to aid in the Constitutional right to a fair trial and help mitigate the media madness.

"Forensic experts perform a job which often permeates human destinies, so that grave mistakes, especially those committed consciously or out of carelessness, help injustice and aggravate the suffering of people who are already in a difficult situation. In such circumstances of life's misfortunes, succumbing to bribes, protectionism and envy, means treading over other people's pain and human lives." (Matejić, S., Otasević, 2010).

Chapter 9: Autonomy

Beauchamp and Childress define autonomy as self-rule, from the Greek *autos* 'self' and *nomos* 'rule', 'governance' or 'law' (2013, p.101). Autonomy encompasses the ability to make informed decisions without undue interference from factors, external and internal, that can influence the understanding of the autonomous agent. In most instances, discussions concerning autonomy revolve around informed consent, respecting confidentiality and privacy, communication and truth telling (Beauchamp and Childress, 2013, p.107; ed. Moodley, 2011, pp.42-43).

Sandel defines autonomy in light of Kant's perception of being an end in ourselves: "*When we act autonomously, according to a law we give ourselves, we do something for its own sake, as an end in itself. We cease to be instruments of purposes given outside us. This capacity to act autonomously is what gives human life its special dignity. It marks out the difference between persons and things. For Kant, respecting human dignity means treating persons as ends in themselves.*" (2009, p.61).

Medicine is full of examples where the autonomy of patients was not respected. That is why many ethical codes and guidelines, especially when it comes to research, are adamant about informed consent. But the rights and interests of the deceased are not as simple to define. People are still dying from many preventable natural diseases; why, then, should there be a concern about prior consent and about respecting the interests of the deceased? That is exactly why institutional guidelines that are built upon international ethical guidelines and our own Constitution are vital, and in the field of forensic medicine. The grim and serious examples of disrespect to deceased people, such as grave diggers retrieving bodies for anatomy departments in the previous century, is very different from where, I hope, we are today.

What can we say about the deceased and autonomy? Obviously, the deceased lacks capacity to make decisions in the first person as they cannot acutely verbalise decisions post mortem. However, as I argued in chapter 2, the deceased can be regarded to have modified moral agency. If the deceased had an advance directive, for example, this document can in fact "speak from grave". Even in the absence of familial consent to the forensic autopsy, the relative's opinions can still be regarded as significant. Their consent post mortem to organ transplantation is an example of this. I will now further substantiate autonomy in relation to the deceased by means of the concept of symmetry.

9.1 The concept of symmetry

Symmetry refers to the similarities of interest that exist between the ante mortem and post mortem person. Wilkinson phrases it like this: "*When there is a partial or complete overlap between the interests of the living and the dead, it looks like a good idea to treat those interests the same.*" (2002, p.35) The bottom line of using symmetry is that we can presume that the interest of the deceased is the same as when they were alive regarding specific matters. It becomes apparent that we need to define which interests overlap, as not all interests are similarly relevant to the living and the dead. For example, a living person does not have a current interest as to their remains being respected, as they do not have 'remains' when still alive. In reverse, the deceased does not have interests in not experiencing pain as these interests are not feasible. To apply symmetry to the context of forensic medicine, overlapping interests need to be identified. Most of these retained interests were mentioned in chapter 3 as well.

Retained interest in privacy

Interests that correlate in life and death are interests in privacy. This was apparent in the previous chapter when I discussed the influence and effect of media on the deceased. Once again, the example of Princess Diana who died in a motor vehicle accident comes to mind. The public wanted to know if she was pregnant. This is an issue of privacy, any sexual behaviour and outflow thereof, including a possible pregnancy. It is probable that Princess Diana would not have wanted the public to know if she was in the early stages of pregnancy and would have desired control over (autonomy) any decision to inform the public. Applying symmetry to privacy in this case would mean that she would have maintained her views about the pregnancy in death. Treating the deceased, then, in the same way by upholding the interest of privacy would mean not divulging this sensitive information of a pregnancy, if present.

Another interest that should be upheld ante- and post mortem is that of reputation. If the example of narcotic use is taken into consideration here, the argument of symmetry would be applied as follows. A prominent mother in the community uses narcotics over weekends. She does not want her friends or family to know about this use. It is apparent that when she dies for whatever reason, she would still not want her family or friends to know of her narcotic use. Why? This can have a negative effect on the way her family and the community perceive of her as a role model, and thus in life and death her reputation can be scarred.

Retained interest in bodily integrity

Bodily integrity in life is important and no one wants their body to be violated for whatever reason. McGuire *et al.*, is relevant here again with relation to bodily integrity, namely that the deceased maintains “*an interest in having their bodies treated with respect and in having their ante-mortem wishes upheld.*” (2010). As an example. If in this life I attach value to my bodily integrity then I would want to be informed if a surgery may by chance involve the removing of an extremity, such as a finger or toe. Therefore, even with amputations for good reason, such as gangrene of the big toe, firstly consent is required. Secondly with an amputation of the big toe, it is not ok to remove the whole lower limb if this was need discussed, or absolutely necessary. Bodily integrity would be violated. In a symmetrical manner during demise if an autopsy is one I would not want any parts of my limbs removed without good reason, and least informing my family members. The parallel between body integrity interest remaining in life and death. An example in forensic medicine is where a child’s eyes are removed for further investigation, especially in possible child abuse cases. Irrespective of who the perpetrators are suspected of being, the parents/care givers receiving the body need to be informed that the eyes were removed, as required, and sockets stitched closed, to try and maintain a manner of integrity and dignity.

Retained property interests

Property interests have been widely written about, especially from a legal viewpoint. I am not going to discuss the legal property rights that survive after death here, except with reference to a retained interest in the sanctity of personal property. I do not want anyone on my property without my permission or knowledge while I am alive. Once again, symmetry says that this interest persists after death. I do not want my house to be entered illegally or violated after I have died either. The importance of property interest remaining after death, as related to the grave, was also thoroughly discussed by Christison and Hoctor (2007), which I mentioned in previous chapters.

Retained interest to have culture and religious beliefs respected

The last important interest to mention that persists after death, is that of religious and cultural importance. In chapter 2, I discussed the relevance of culture and religion to the deceased's moral standing. Many religions and cultures maintain that bodily integrity or certain burial practices and rituals surrounding death are important; these include Hindus, Orthodox Jews, Jehovah's Witnesses, some Traditional African religions, Chinese and other eastern religions, the Maori, and ancient Egyptians, to mention but a few.

This concept of symmetry between ante- and post mortem wishes, has application to forensic medicine, as we can utilise symmetry to aid us in decision making. General areas of symmetry are present in the deceased, such as respecting privacy as far as legally permissible, within the context of a case by case basis. Bodily integrity and upholding reputation are also interests that should be upheld. Uncertainty as to the deceased's specific choices in life could be ascertained by asking the family, evaluating an advanced directive or will, if available, and keeping the religious belief and cultural background in mind. This will aid in applying symmetry to the principle of autonomy. An interesting concept is also the aspect of promise keeping, which of course is linked to the last will and testament of the deceased and the obligation of those left behind to fulfil it (Brecher, 2002, p.111).

I will now explore two aspects related to the autonomy of the deceased. First, I will explore confidentiality and the limits thereof. Second, I will discuss "consent" and its limits.

9.2 Respecting confidentiality and limits thereof

In exploring whether rights theory remained applicable to individuals after death, Wildfire *et al.* reached a conclusion like that of the application of symmetry: "*There is absolutely no correct answer to the rights theorem when dealing with confidentiality issues surrounding dead individuals, but the principles used in life apply. There are no rights reserved.*" (Wildfire *et al.*, 2007, p.477). The example they used was that of a post mortem HIV test. The deceased did not specifically say in life if he wanted people to know about his HIV status, so his ante mortem wishes in this regard were not known. Wildfire *et al.* did not use the HIV example purely in terms of the stigma surrounding it, which I found refreshing. Their conclusion was that the deceased's HIV status should not be shared with loved ones: "*The question is not how socially relevant is a test or what stigmas does a disease possess, but whether any piece of patient related data obtained while under medical care should be subject to public scrutiny.*" (Wildfire *et al.*, 2007, p.474).

In the forensic medicine context, the privacy and confidentiality aspect of findings during autopsy is governed by the South African judicial system. The details of the legal aspects were thoroughly discussed in chapters 5 and 6 already. The National Health Act is consistent with the South African Constitution in ensuring that all patients have the right to confidentiality: "*Health care practitioners still have an obligation to keep personal information confidential after a patient dies. The extent to which confidential information may be disclosed after a patient's death will depend upon the circumstances*" (HPCSA booklet 10, 2008, p.10). The circumstances as to when after demise information may be divulged are also listed. These include the legal reasons previously mentioned, such as with an inquest, audits or public surveillance as cleared by ethics committees, as well as death certificates if relevant to cause of death. Notifiable diseases are an example of where confidentiality is limited. This is related to public safety concerns, which outweigh the individual's interest in privacy. Causes of death included in the Disease Notification System are meningococcal infection, agricultural poisoning such as organophosphates, rabies, malaria, and TB in all its forms,

to mention but a few examples. The National Code of Guidelines for Forensic Pathology Practice in South Africa also contains the details of the notifiable diseases (2007, pp.63-66).

Specific mention is also made in the HPCSA's booklet that medical information may only be divulged with the written consent of next of kin (2008). This is especially important when third parties, such as insurance companies, need specific information prior to paying out policies. This remains even more difficult in unnatural deaths when the death is still *sub judice*, and prior to the divulging of any information the presiding judicial officer needs to give permission as well.

What this brief discussion illustrates is that confidentiality remains important even after demise. If general information about an individual is not related to the cause of death but is of a sensitive nature, such as having an early pregnancy, third nipple or body piercings in private areas, this can be embarrassing to the family and taint the reputation of the deceased. In this scenario, this type of information needs to remain confidential. Certain information obtained, prior or during autopsy, may be relevant to the determination of the cause of death. That obviously then trumps any prior wishes of the deceased or symmetry discussions at hand. This means that if the narcotic tests or HIV test are relevant to the case at hand, this information cannot remain in the confidential arena. It does, however, still retain a measure of confidentiality as it should not, and does not need to be, public knowledge through media involvement, especially in the case of well-known public figures.

Maintaining confidentiality with the family can be a bit trickier. HIV status, when directly related to the cause of death, should be stated on the Death Notification form. As this type of infectious disease information has an influence on the sexual partner/s or spouse, especially in accessing health care and treatment if required, the confidentiality should be waived to the safety aspects of infectious diseases. This is in keeping with the HPCSA guidelines of disclosure, including disclosure of HIV results (HPCSA's Booklet 10 and 11, 2008). The only difference is that the deceased cannot be consulted for input in the matter. The same sensitivity should symmetrically be applied with the deceased in sharing any information, including HIV disclosure, as one would have done in life.

Since the earliest of times even the Hippocratic oath stated confidentiality as fundamental: "*Whatever, in connection with my professional practice or not, in connection with it I see and hear, in the life of men, which ought not to be spoken of abroad, I will not divulge as reckoning with that all such should be kept secret*" (n.d.). This sentiment was echoed in the WMA International Code of Medical Ethics previous 1983 version, that stated that "*confidentiality is an absolute requirement, even after the patient's death.*" Unfortunately, the most recent version of this document has omitted the reference to "even after the patient's death" (2006), I could not ascertain why. It is important in all confidentiality discussions to weigh the individual's interests as against those of society. The well-known words quoted by Wildfire *et al.* are also relevant here: "*the right to patient confidentiality ends when public peril begins*" (2007, p.477). Therefore, national policies have notifiable diseases as an example of when society's interests outweigh the confidentiality of the deceased.

I will now briefly discuss a case where autonomy of the deceased is relevant. The context is where an autonomous decision in life has led to death in connection with narcotics, or in the case I will discuss, with the use of an inappropriate drug. The case I have in mind is the death of the singer Michael Jackson. It is now a known fact that he died in 2009 after administration of the anaesthetic Propofol and two other sedatives, administered by his own private physician employed for this purpose. Jackson requested this drug to help him sleep, as he suffered from insomnia. I am not going to discuss the verdict of the case. The main question at hand is not only whether Michael Jackson had made an informed decision regarding the Propofol administration, or that the doctor found guilty administered the drug as requested. The question is also about confidentiality and

privacy within this autonomous situation. McQuoid-Mason explored the autonomous decision of Jackson and its implications in the South African context; to summarise his conclusion: “*patient autonomy does not extend to doctors acting unethically or breaking the law at the request of their patients*” (2012, p.12). In this case the importance of including narcotic and drug tests during autopsy is highlighted. The autonomous decision, although debatable and with questionable guidance, that the deceased Jackson had made during his life resulted in premature death. The doctor-patient relationship that involves respect for privacy was no longer applicable, due to the cause of death as a direct result of the scenario above. The case had to be investigated legally. The media’s publication of the cause of Jackson’s death, as a world-renowned singer, would have been impossible to prevent.

My question flowing from the above case is this: when in forensics can autonomous decisions be symmetrically respected in death and privacy upheld? The answer is, in a case by case manner. If Michael Jackson had died, for example, in a plane crash, also an unnatural death, would that influence the confidentiality at stake here? I think so, yes. If he happened to use drugs the previous evening, or even used Propofol, however questionable his decision was, this information should not have been relevant to the formation of the cause of death determination. It would of course be important to test the pilot of the plane for narcotics, for obvious reasons. Or if Michael Jackson was shot or stabbed, the same respect for confidentiality should apply. In these other proposed unnatural deaths, his narcotic use should not be reported on. Then again, if he died while scuba diving, it would be very relevant if narcotics or sedatives were involved, as these could have led to sub-optimal body conditions whilst diving and subsequent death. That is where the principle of respecting autonomy is relevant. In forensic medicine, it is crucial to consider all the facts of each case at hand prior to doing the autopsy and deciding which tests may be important. Respecting autonomy also means disclosing the results to the appropriate parties, if needed, and in such a manner which is least harming to the surviving relatives, as well as the deceased and their reputation.

The essential point of confidentiality in forensic medicine is to consider previous wishes and interests of the deceased. Cultural and religious concerns must also be regarded, and symmetry applied. Currently in our South African resource limited setting, routine testing of HIV or narcotics as an example is not being done (excluding blood alcohol tests which are mandatory in all individuals above 18 years of age). These tests are conducted only if essential for the case’s cause of death determination, or specifically requested by the involved legal representative. This approach would aid in less ethical issues arising from confidentiality in forensic medicine. As the authors Matthews and Martinho conclude their article, “*because maintaining strict confidentiality is often untenable, or even illegal, determining the extent of protections in the post-mortem context ultimately entails a weighing of the various interests at stake*” (2012, p,722). However, this approach may not always be the best. It may need to be reviewed if resources are more and may in fact become important from a legal point of view if HIV is routinely done in order to communicate this to the intimate partner, so they may seek testing themselves.

9.3 ‘Consent’ and the limits thereof

In this discussion, the meaning of consent is not as easily defined as consent would be for a living individual. Forensic autopsy negates the need for consent as it is sanctioned legally. The form of consent being discussed here is related to the deceased’s prior interests, as per this chapter’s introductory ideas relating to symmetry. Consent and the deceased should also be seen in the light of relational aspects, such as the families’ input. Another question is related to limitations towards respecting the interests and requests of the deceased. The request can be known via verbal

acknowledgment of witnessed statements or the written requests of a deceased in a will or testament.

Objections to forensic autopsy

An obvious limit to the “consent” of the deceased is when he/she has stated refusal of an autopsy upon death in their testaments. In this situation, the hospital/anatomical autopsy is not an option, but a forensic autopsy would still be performed if required, as underpinned by statutory requirements in South Africa. Interestingly, there have been cases in other countries where an autopsy has been waived due to strongly-held religious views. This was illustrated in an earlier chapter by reference to the Orthodox Jewish woman killed by an automobile. This is an unnatural death requiring an autopsy in South Africa. The family opposed the proposed autopsy, and the judge upheld their request in the light of her religious interests. The judge stated that “*there was no sound reason to permit an invasion of deep-seated religious beliefs to merely satisfy curiosity as to the cause of death.*” (Nelkin and Andrews, 1998, p.287). Another similar case was also illustrated by Nelkin and Andrews, where the court also ruled in favour of religious beliefs; the court felt “*that the purpose of the autopsy, to determine the manner of death, was so obvious in the case of a man killed in a car accident that the state could not justify overriding the religious beliefs of the decedent or his family.*” (1998, p.286). This is indeed a case where the ante mortem religious interest of an individual was upheld post mortem. In these two cases, the principle of symmetry in autonomy is well shown.

However, this is an exception and not always feasible in South Africa where unnatural deaths need more stringent investigations. Having said this, limited post mortem examinations do occur regularly in our forensic facilities. These mostly involve SUDA cases and are referred to as post mortem examinations, not autopsies. Many forensic doctors interpret “autopsy” to encompass actual dissection of the body. Post mortem examination, also known as a “view and grant”, involves no opening or cutting of the body in ascertaining cause of death. An example would be an obese deceased man where the family says diabetes was recently diagnosed; shortly before demise the decedent complained of severe chest pain but died before arriving at hospital. A limited autopsy (post mortem examination) in this case involves a history of most recent sign and symptoms prior to demise and police report. If foul play is excluded and no obvious injuries noted on the body disputing the history, there is no need to open the body. The cause of death is then stated as: ‘Diabetes and the consequences thereof’, or ‘presumed myocardial infarction secondary to underlying diabetes’. We see this distinction in method of ascertaining cause of death in the recent Stats SA report. Almost 25% of cause of death determinations were stated as by post mortem examination and less than 10% as by autopsy (Stats SA, 2017, p.21). The decision regarding which method to employ does not rely on the deceased’s wishes related to autopsy preference. However, respecting the deceased’s possibly known background information, such as culture and religion, could help in this consent-limiting setting. I will explore a few future avenues in my concluding chapter in relation to minimally invasive autopsy and post-mortem sampling.

Consent and research in the deceased

My previous chapter included an extended discussion on research and consent in the deceased. Lack of consent increases the risk for potentially unethical research, as illustrated in the case of AIDS victim Christine Arnaud. The important factor to consider in research of the deceased is any written or verbal previous acknowledgment by the deceased that opposes or condones research. If the deceased’s interest regarding proposed research are not known, it is important to get consent from the family, if possible: “*In addition, when an autopsy is legitimately undertaken to determine if a crime has been committed, the body should not be subject to additional research unless consent*

of the individual or family member has been obtained." (Nelkin and Andrews, 1998, p.291). This view of consent and the deceased was reiterated by numerous authors (Skegg, 2003; Knoppers *et al.*, 2006; Hermann, 2011; Rigaud *et al.*, 2011; Evans, 2001; Michaud *et al.*, 2009; Jones *et al.*, 2003).

Even though the next of kin cannot object to a medico-legal investigation, further research is not automatically included legally, and consent should be sought, as the quote by Skegg illustrates, *"in the overwhelming majority of circumstances, it would be both reasonable and practicable to enquire of one or both parents of deceased child, to determine whether they object to the contemplated course of action."* (2003, 432). I would add spouse/next of kin to the above quote and not limited it to research or retention of organs of children. This can become important when tissues, organs, and/or bodies are potentially required for academic and educational purposes as well. This was clearly seen in the Alder Hey and Green Lane 'heart library' controversies. I will briefly look at limitations to research "consent" and the deceased below.

The National Department of Health's Research Ethics Council's (NHREC) guidelines in their *Ethics in Health Research Principles, Processes and Structures*, addressed the issue of research on the deceased and retained biological tissues (2015, pp.30-33). In most of the forensic cases where biological tissues are collected, it is for diagnostic purposes to aid in the determination of the cause of death. No consent is required for this. If this retained tissue is no longer required for the forensic case, then it is usually archived. This tissue cannot be used for research without consent. If the deceased had consented while still alive, this is acceptable. If no ante mortem consent is available, then consent of the relatives is required ethically: *"In the case of a deceased person, consent to removal and use of biological materials may be found in the Will of the person, in a written statement or in a witnessed oral statement (NHA s 62(1)(a)) or may be provided by 'the spouse, partner, major child, parent, guardian, major brother or major sister of that person in the specific order mentioned' (NHA s 62(2))"* (2015, p.31).

In cases where research was not purposed from the outset, and where retrospective consent cannot be obtained, the applicable Research Ethics Committee would need to determine if research can be conducted under stringent measures, for current or future research. The risk always remains that any biological material will be linked back to the deceased or their families.

The important point about research in the deceased, regardless of national setting, is *"to protect autonomy and prevent exploitation of vulnerable potential research subjects, while facilitating research that will ultimately benefit society"* (Knoppers *et al.*, 2006, p.361). Therefore, a research ethics committee should clear all proposed research, and at the very minimum ensure that ethical standards of research are upheld, including of the deceased.

The following is a succinct summary of considered ethical risks associated with biological material and the deceased: *"Although data and biological material are separate from their source (e.g. a particular patient), they symbolise that person. Hence, ethical considerations concerning their use involve how to access and use them appropriately, how to manage potential privacy concerns that may arise from information management, as well as how to address the special status some segments of the population ascribe to the human body and its parts. RECs and researchers must demonstrate sensitivity to the values, beliefs and attitudes of the persons from whom the materials are derived."* (NHREC, 2015, p.30).

Organ and body donation and consent limitations

The scope of consent is also important to mention when we are discussing limitations of consent. The case of Karin Silkwood, described by Nelkin and Andrews (1998, p.275), is illustrative here

(1998, p.275). Karin was an anti-nuclear activist and worker at a fuel rod plant, when she was killed in a motor vehicle accident *en route* to exposing safety violations at the plant. She underwent an autopsy, only for determination of cause of death as far as her family was aware. Many organs were removed during autopsy, analysed, and stored as a repository; the family only discovered this many years later. Two decades after the initial autopsy, researchers sought additional consent from the next of kin to continue to store her tissues, as well as for potential research in the future. The Silkwood family, just as in the case of Henrietta Lacks' family, were unaware of the stored tissues and very much harmed. This was not in keeping with the original consent the father gave for his daughter's autopsy. South Africa would not require consent in this unnatural death case to perform the autopsy. Keeping organs without informing the next of kin, such as a brain if further clarification is required in a diffuse brain injury case, may be legally warranted as per the NHA. The unethical conduct to not inform the family, and then keep the brain for future education or research without their permission, would be a infringement of the autonomy of the deceased if the deceased had refused such an action. We saw this dilemma with Einstein, where his brain was retained despite no record of consent by him, and ignorance of the retention by his surviving family.

With high organ donor demand and body scarcity for tertiary teaching departments, there is always a risk of disregarding autonomy. We see this in the unsavoury history of body procurement for anatomical research in the 1800s. Body snatching, particularly from recent graves, was a common practice. Later, bodies were sourced from prisons and mental asylums (Christison and Hctor, 2007, p.29; Hermann, 2011; Jones, 2011; Nelkin and Andrews, 1998, pp.261-266). Even today, only a small proportion of the bodies supplied for the teaching of medical students and for anatomy departments of universities are bequests (Jones, 2011). Most remain unclaimed bodies, comprising mostly poor and socially marginalised people. This is a sad indeed.

Let's briefly discuss organ harvesting in relation to autonomy. Most systems of organ procurement address the consent issue in various ways. Seeking consent, whether ante mortem from the deceased or post mortem from next of kin, remains an important topic to discuss: "*Based on altruism and respect for autonomy, the procurement of cadaveric (and living) organs has always depended on voluntary donations.*" (Spital, 1994, p.1244). The large need for suitable donors, partly due to opt-in systems currently in place in most countries (including South Africa) because of resource constraints, makes organ procurement tricky (McLean,2005; Pinckard *et al.*, 2007; Spital,1994). The resource limitations were briefly discussed in the distributive justice chapter. A large portion of donations are cadaveric, and thus the deceased's interests must be considered.

First, if the deceased was known to opt-in for organ donation when still alive, donation becomes a viable option since it is consistent with the autonomous decision of the deceased prior to demise. An important article by Pinckard, Wetli and Graham thoroughly discussed the considerations that are applicable in the forensic context of organ and tissue transplantation release (2007). In these instances, the case would have to be discussed with the forensic doctor on standby to ensure the requested organs are not important for the forensic case at hand. For example, if the cause of demise was related to a gunshot wound to the head, the donation team might be cleared to take the heart and kidneys (Pinckard *et al.*, 2007). Their conclusion was that a medico-legal autopsy should not be an exclusion to donation, if consent for the donation (deceased or familial) is in place (Pinckard *et al.*, 2007, p.206).

Another avenue for donor organs is "presumed consent", where consent is presumed unless a specific prior objection to be an organ donor was voiced by the deceased. This is common in many European countries, such as Belgium and France. Ironically, the obligation of the health care team to search for any recorded objection is onerous and time consuming and does not always make it easier to donate. In many cases, familial consent is required anyway, to ensure there was no

objection (Spital, 1994, p.1245). This system has its own challenges, especially if it were to be adopted in South Africa. Given the amount of illiteracy, language barriers and lack of access to information, the amount of effort required to ensure everyone is informed of their option to give an objection would be extremely challenging. To be able to know if an autonomous, well-informed objection was made, and not being able to assess if the deceased was informed, is too difficult. Even though the organ yield in our current system is low and demand is high, at a minimum our current system is respecting everyone's individual freedom, which given our recent history of human rights violations is very important.

If the deceased's preferences regarding organ donation are not known, the family's consent is important. In the same manner, without consent from family or written/verbal permission, harvesting of any organ or tissues cannot just ensue, given the high probability of post mortem harm. The intricate relationship between the living relative and the deceased donor is specifically relevant to organ donation discussions (2005). Given the potential of post mortem harm to the family, as argued throughout the thesis, consent from family for organ procurement, in the absence of ante mortem consent from the deceased, is paramount.

Previously, corneas were routinely harvested during autopsies due to high demand, without consent or knowledge by the deceased or next of kin. No matter the need, the deceased should never be an 'organ farm'. This is especially important in our society with such a discrepancy between the rich and poor. It is apparent who will fall by the wayside if consistent, ethical standards are not in place.

Etheredge, Turner and Khan conducted a recent South African study to evaluate the attitudes towards organ donation in two urban South African population groups (2016). The authors found an overall willingness (70-91%) to be a donor themselves; but that "*both the black African and the white populations expressed reluctance to make a decision on behalf of another person*" (67-83%) (Etheredge *et al.*, 2014, pp.134, 136). This was interesting, and the authors postulated various reasons why people may be more reluctant to consent on behalf of a loved one. These included overall changes in the health care system away from previous paternalism, a "*more rights-aware population*" in favour of autonomy, geographical challenges of distance between relatives in urbanisation, and cultural challenges (Etheredge *et al.*, 2014, p.136). The applicable African cultural challenge mentioned was the expressed desire to enquire from elders for permissibility, with proximity issues potentially hampering the consent process (Etheredge *et al.*, 2014, p.136). This is a valid limitation of consent in our country which must be recognised, as our Constitution underscores the right to freedom of cultural and religious expression.

Limitations to upholding ante mortem wishes

What about autonomous decisions where the deceased, prior to demise, or the family after demise, request sperm or ova retrieval? Is this request feasible to be upheld post mortem? We briefly touched on this in the argument for modified moral agency in chapter 2, which in the case of the deceased comes down to an autonomous decision the deceased made ante mortem. This was also mentioned in chapter 3. These decisions could have been expressed in a living will, testament or advanced directive. These written expressions of wishes can be seen as contracts, in a sense. They ask a reciprocal action of a third party. Sandel discusses the moral weight that contracts carry in terms of "*autonomy and reciprocity*" (2009, p.78). His argument comes down to the fact that not all contracts necessarily carry the same amount of weight morally, to fulfil the obligation they created. In other words, there are limits, and the deliberation should be about the feasibility of the requested actions from a third party. "*In practice, these ideals-autonomy and reciprocity-are imperfectly realized... This points to the moral limits of consent: In some cases, consent may not*

be enough to create a morally binding obligation; in others, it may not be necessary." (Sandel, 2009, p.78). The same principles can be extrapolated to a living will, testament or advanced directive. The question we need to ask then is this: when is the retained post mortem interest to an ante mortem wish not feasible to uphold? In other words, the discussion is around the limitations. I will use the example of post mortem sperm and ova retrieval to illustrate the potential of limitations to consent.

Post mortem sperm retrieval (PMSR) has had much success in the past few decades due to modern technologies, although requests are infrequent (Weber *et al.*, 2009; Orr and Siegler, 2002). The first live birth after post mortem sperm retrieval was in 1999 (Lota, 1999). The main question at hand is not whether it can be done, but should it be done? Even if there is proof that the deceased man requested this ante mortem? In this regard PMSR would be correlated to the retained ante mortem interests of the deceased. But how far should requests for PMSR be upheld if the deceased's widow requests this? Can this request uphold the autonomy of the deceased? It can possibly, but if it should be done is a different question all together. The matter becomes even more complex when post mortem ova retrieval is requested. The case where the Israeli courts upheld a family's request to extract and freeze the eggs of their daughter, who died in a fatal car crash, was understandably widely debated (Conley, 2011). Not only would the family that requested the ova of their deceased daughter require sperm donation for fertilisation, they would also require a surrogate mother to carry the pregnancy. The ethical complexities of this case are vast. These are tricky questions and I think the best summary I have found reads, "*the technical feasibility alone does not morally justify such an endeavour.*" (Orr and Siegler, 2002, p.299). The forensic doctor, as a role player in this possible retrieval of sperm and ova, should carefully think what impact these decisions would have for the deceased, the family and even larger society. In the case of a PMSR request from the wife saying it would have been her husband's choice, the 'autonomous' decision may need to be overridden if sufficient proof of consent is not available, such as with an advanced directive. Even if consent is verified, it is important to discuss the appropriateness and feasibility of the request.

I will conclude this chapter with a further illustration of the limitation of consent by a consideration of Gunter von Hagens' *Body Worlds* Exhibition. What does permission and consent in the deceased really amount to? Let us presume that all the bodies of the *Body Worlds* exhibition have consented to being in the plastinates collection of Von Hagens, and all the legality of the "live" public exhibitions were in order, although some authors dispute this (Herrmann, 2011; Jones, 2011; Jones and Whitaker, 2009; Miah, 2004). It is not the place here to debate the validity of the consent or body donation process. It is important to note that this discussion is related to limitations of consent and the deceased, and not only in the forensic sphere. All bodies applicable for donation for plastination had to have died of natural causes, according to the *Body Donation for Plastination Brochure* (n.d., p.35). Forensic and anatomical pathology autopsied bodies can also not be donated, again according to the donation brochure (n.d., p.35).

My concern relates to the extent of the consent in relation to these public exhibitions. There have been numerous articles debating their place and function, specifically the public displays. The three objectives of the Institute of Plastination are stated as "*Improving overall anatomical instruction. Improving awareness of medical issues, particularly among the general public. Popularizing and developing plastination techniques.*" (Body Worlds, n.d.)

My question as related to autonomy and consent then, and the body being part of a *Body Worlds* exhibit, is exactly what did the initial consent entail? Let us consider this question together with the objectives of the Institute of Plastination. Jones and Whitaker echo my concern when they said, "*that an entertainment rationale has replaced an educational one as the main driving force behind*

these exhibitions." (2009, p.772). The entertainment being used is actual human material, and not merely just artwork on canvas that is on display. How far did the consent, done ante mortem, convey the entertainment and even entrepreneurial aspects of the exhibitions? As Jones asked; "*are there...no moral boundaries once informed consent has been satisfied?*" (2011, p.22).

I asked my oldest pre-teen daughter about limitations if she were to donate her body after she died. Interestingly, she answered that she would not donate her body, but if she did, she would not like to have her body displayed sitting on a toilet. Which was a good point to illustrate the private arena of one's life. If we do not want these private areas exposed while alive, we surely would not want these displayed after death either. The reason I am emphasising this is related to one of the world-wide public exhibits, I saw in South Africa in 2013, entitled *The Cycle of Life*. The one display of this exhibit that evoked a huge response was the exhibit of two plastinates, i.e. previously ante mortem living beings, who were engaged in a provocative act of procreation. Whether these two individuals consented to this exact position and purpose is questionable. How far does consent then stretch? As my daughter aptly noted, there are areas of our lives which would probably continue to be viewed as private once we have died. Consider too the much-discussed (and viewed) public autopsy that Von Hagens performed on live broadcast television. To what extent does this public autopsy sway towards entertainment, more than education? "*On this view, the autopsy challenged the way in which medicine creates boundaries between what is public and private and what counts as a legitimate exercising of personal autonomy.*" (Miah, 2004).

Body Worlds has become more than mere anatomical instruction and education of the public, it has become a commercial enterprise that needs to be discussed within each country's legal and ethical frameworks prior to exhibitions and before certain displays are highlighted. It is also clear from the above example that many religious and cultural groups will have serious objections as to the moral integrity and dignity of the corpse in relation to the exhibition. I do propose that there are limits to consenting, as we see in the requests for PMSR and ova retrieval, as well as in *Body Worlds*-type exhibits.

So, we see in this chapter that upholding consent as an autonomous aspect in the deceased should be on a case by case basis. The answer to the limitations of autonomy relates to the ethical values that need to underscore the decision-making process. In the absence of advanced directives and wills, the family needs to be involved, within the greater cultural backdrop. In respecting the privacy and confidentiality of the deceased, the Constitutional right to dignity is also upheld.

Chapter 10: Conclusion

10.1 Final thoughts

In the introductory chapter, I introduced the need to explore the ethical terrain of forensic medicine within our South African context. Two questions capture the aim of the thesis. The first: *do ethical issues exist in the field of forensic medicine in the South African context, and what are some of these issues?*

The conclusion to the first question was that there are indeed ethical issues in forensic medicine and these issues are present in South Africa, and in forensic medicine globally. In summary most of the ethical concerns revolve around the conflict of interest conundrum. I have used dual loyalty and conflict of interest interchangeably throughout the thesis. Conflict of interest situations in forensic medicine was illustrated in South Africa's recent history by exploring the circumstances around Mr Steve Biko's unnatural demise and subsequent medico-legal investigation. Current dual loyalty concerns involve the deceased and the intricately linked judicial system, under which the forensic doctor works. Ethical issues that stemmed from these dual loyalty situations include the forensic doctor as expert witness to the court. Another example includes the death investigations of human rights abuses, such as with war crimes or mass graves. In these cases, the forensic doctor may have a loyalty towards the contracting human rights affiliated organisation which could taint the neutrality of the doctor. The second major area of ethical issues relates to retained post mortem interests of the deceased. Some of these issues that were explored in the thesis included issues surrounding retained interest of the deceased for confidentiality and privacy. Ethical issues around retained ante mortem wishes of the deceased was also discussed. The deceased also had a retained interest for bodily integrity and to have religious and cultural interests respected.

The second question follows from the first: *if there are ethical issues, how can they best be identified and explored?*

In summary the second question was explored in two parts. First, I needed to identify a possible ethical framework to aid in structuring the analysis of these identified ethical issues of chapter 3 that I found existed in forensic medicine. Then I wanted to explore some of these issues by means of the chosen framework. Chapter 4 in essence briefly discusses some of the possible existing ethical and philosophical theories I contemplated using as a framework in forensic medicine. I decided to use the principlism approach as framework. Most of the thesis revolved around the last part of my second question, namely the exploration of the ethical issues in forensic medicine by means of the four principles.

Prior to exploring potential ethical issues within forensic medicine by means of principlism, I first had to establish the moral status of the deceased. This was a very important chapter as it laid the ethical and philosophical basis for attributing moral standing to the deceased. In chapter 2 I delved into the moral status of the deceased by looking at five commonly postulated arguments for moral status and exploring these arguments in relation to the deceased. Three of these arguments were significant for establishing moral standing of the deceased. These arguments that were used related to the deceased: the human properties of the deceased, a modified argument for moral agency of the deceased, and the relational consideration in terms of post mortem harm. Fourthly, the importance of cultural influences and the religious beliefs of the deceased were discussed in relation to moral significance. Lastly, symmetry was applied to strengthen the position of the deceased as a moral agent worthy of ethical deliberation and consideration. To reiterate Haddow's earlier quoted sentiments: "*What has become obvious is that respecting the deceased's body is*

not just about dying and death, but the experience of the living, the identity of the deceased and the strength of social relationships.” (2005, p.110).

After establishing the moral significance of the deceased, I could start exploring ethical issues related to the deceased. In the third chapter I aimed to answer the first initiating question that had prompted my thesis. The existence of ethical issues in forensic medicine, internationally as well as in South Africa, could not be denied. As I mentioned above most of the concerns were related to the dual loyalty conundrum and the retained post mortem interests of the deceased. The judiciary-regulated field of forensics results in conflict of interest situations. The forensic doctor, although employed by the Department of Health, functions under the regulations as stipulated in the statutes governing medico-legal investigations. The loyalty of the forensic doctor towards the deceased is complicated due to the obvious restrictions related to death investigations. This is exactly why ethical exploration in forensics is so important. The forensic doctor is to act undeterred by external forces and remain impartial in both these mentioned dual loyalties situations.

Post mortem harm remains a significant factor to consider when working in the forensic field. Involving and informing surviving relatives of pertinent concerns is paramount, especially given the lack of consent that is present in the performance of medico-legal autopsies. If the deceased's retained post mortem interests were not considered, this could result in ethical issues. Retained interests included upholding bodily integrity, identification, confidentiality, and upholding ante mortem wishes. These were also discussed in chapter 3.

It was not easy deciding which theoretical framework to choose in the complex forensic medicine environment. This was discussed in the fourth chapter where I briefly illuminated some of the well-known theories and discussed their possible applicability to forensic medicine. The fourth chapter has the potential to be a dissertation on its own. Each discussed theory could be expounded in more detail and its applicability deliberated to the forensic context. This may be a possible avenue of pursuit in the future. However, for the aim of my thesis I had to choose a framework and try and apply it to forensic pathology. I choose principlism as approach. *“If forensic practitioners follow the basic ethical principles of respect for autonomy, beneficence, non-maleficence and justice, they will be complying with the provisions of the Constitution and the ethical codes of the profession. It will also enable them to overcome the dilemmas of dual loyalty and to carry out their duty to the court.”* (Dada and McQuoid-Mason, 2006, p.140). This conclusion, from an article which looked at ethical issues in the forensic medicine field within the South African context, is a succinct summary indeed and highlights the dual loyalty dilemmas so prominent in this field of medicine.

Chapters 5 to 9 all deal with some of the possible ethical forensic concerns by means of principlism. I started with the principle of justice as the forensic field is intricately linked to the judicial system. The term ‘fairness’ was attributed to justice by many authors (Beauchamp and Childress, 2013, p.250; Dada and McQuoid-Mason, p.37; ed. Moodley, p.73). The concept of justice as *“fair, equitable, and appropriate treatment in light of what is due or owed to persons”*, came down to all humans being treated equally (Beauchamp and Childress, 2013, p.250). Three obligations were attributed to justice, namely: 1) to respect morally applicable laws; 2) to respect the rights of people; and 3) the fair distribution of limited resources (ed. Moodley, 2011, pp.73-85). Each of these three obligations were discussed in separate chapters.

The South African legal justice system, specifically laws governing the practice of forensic medicine, was highlighted. The distinction was made between law and ethics: *“In summary, then, ethics establishes principles, general normative patterns of behavior that allow the criticism of human conduct. Morality establishes norms that are freely accepted so that, when transgressed,*

uneasiness and social criticism will result. Law establishes regulations that are imposed and that carry state sanctions when not complied with." (Taborda and Arboleda-Flórez, 1999, p.190).

I briefly explored the relationship between ethics and law. The premise upon which I based the discussions in chapter 5 can be summarised by the following quote: *"In general the ethical rules of the health professions tend to coincide with the law, but in rare instances where the law conflicts with such ethical guidelines, the health professional should, in appropriate circumstances, adhere to the maxim: 'ethics always trumps the law'"* (Dada and McQuoid-Mason, 2010, p.60). The following statutes were summarised and thereafter discussed in terms of their ethical applicability:

- Inquests Act
- NHA
- Health Profession Amendment Act
- The Births, Marriages and Deaths Registration Act
- Occupational Diseases in Mines and Works Act
- Correctional Services Act
- IPID Act

Chapter 6 delved into the rights-based justice aspects of forensic medicine. Rights were noted as *"entitlements people can claim relating to their basic needs"* (ed. Moodley, 2011, p.88). When a right was identified, the reciprocal duty or obligation to fulfil this right was then noted. This was emphasised by authors Beauchamp and Childress (2013, pp.15-16) and London (ed. Moodley, 2011, p.92), and mentioned in the HPCSA's guidelines (Booklet 1, 2008, p.4). In keeping with South Africa's Constitution, the Bill of Rights (1996, pp.5-20) is a document that focuses on the rights that all people should have. This important legal document is in keeping with international human rights, such as those contained in the UDofHR. In this chapter, I identified three rights which I thought were still applicable to the deceased. The first two were the right to confidentiality and right to a fair trial that are both in the above documents. The right to identification I identified was however not contained in the UDofHR or the Bill of Rights.

Confidentiality pertaining to the deceased was summarised by Wildfire *et al.*: *"The ethical duty of the confidentiality extends beyond the death of the patient, although legislation... permits limited disclosure to be justified based on the particular circumstances and knowledge of the patient's wishes...often a decision to disclose will not be based on the interest of the subject but is made to protect other people and the public at large."* (2007, p.475).

The right to identity was linked to the importance of attributing dignity to the deceased. I wrote that the concept of dignity was linked to being human and understanding the intrinsic value of human identity. The equation obviously leads to the importance of the right to identification. Basically, if an individual is not identified, then it becomes difficult to attach dignity. The importance of identifying the individual, especially in cases of unidentified bodies, was thoroughly discussed. The article by Nuzzolese was especially relevant to this topic (2012). He emphasised the importance of identification of unidentified bodies, especially with the large number of missing persons today due to various factors such as international migration. Identifying a person post mortem brings closure to families and gives the relatives an opportunity to mourn the death of a loved one.

"Forensic Pathology Services has as its primary objective the rendering of a medico-legal investigation of death service that serves the judicial process...standardised and uniform protocols and procedures are followed nationally, rendering objective, impartial and scientifically accurate results." (National Code of Guidelines for the Forensic Pathology Practice in South Africa, 2007, p.5). This quotation was tied to the last right, related to a fair trial, that was discussed in chapter 6. I

looked at the three phases of a medico-legal investigation, which is concerned with answering the primary questions governing forensics. These concern identity, cause and mechanism of death, timing of death and if there is a correlation with the demise to an act of omission or commission. This is important for the trial to be “*objective, impartial and scientifically accurate*”. The phases of the medico-legal autopsy were discussed in detail; they are the pre-autopsy (death scene), autopsy, and post-autopsy (ancillary investigations) phases.

The recent spate of news revolving around forensic issues, ranging from toxicology analysis delays to forensic pathology officers striking and complaining of workloads at mortuaries, illustrated that, despite being an often-forgotten field, forensic medicine has significant impact medico-legally and relationally. The news headlines tend to be sensationalist. The combination of medicine, law, and governing structures, coupled with resource restraints and grieving families, focuses the need for ethical deliberation. This discussion should lead to institutional codes of conduct and national ethics policies that govern this complex field. This also highlighted the distributive justice aspects that are important in forensics and which were well discussed in chapter 7.

Distributive justice was presented in relation to the large number of medico-legal autopsies that are performed annually, in conjunction with service delivery constraints. Some of the mentioned resource restraints were the small number of qualified forensic pathologists, medico-legal facilities needing upgrading, overburdened toxicological laboratories, large incidence of natural diseases diagnosed only at autopsy and not through routine service, and lack of standardised national protocols to deal with certain types of death, such as sudden, unexpected deaths in infants. The following was also noted by Du Toit-Prinsloo and Saayman: “*It is inevitable that many thousands of these autopsies will be conducted by colleagues who have little or no formal training in autopsy pathology and technique. In addition, poor facilities and the lack of other resources unfortunately contribute to many instances where the judicial and administrative processes surrounding death are compromised.*” (2012, p.54).

The principles of beneficence and non-maleficence were discussed in chapter 8. Beneficence was stated as a benevolent, good, virtuous action towards another. The positive act of doing good in the forensic environment was therefore aligned with the different role players involved in the medico-legal investigation. These were the deceased, the family, the police and judicial system, and the greater community. The keeping of larger emotive organs was explored in relation to acting benevolently towards the deceased and upholding their dignity and bodily integrity. My second discussion around benevolence was towards the greater society. As an example, the under-notification of TB in unnatural deaths was highlighted. This, in the context of a TB epidemic, results in under-estimation of the true scope of TB in the country. Lack of accurate statistics obviously leads to underestimation of the true burden of this disease and underfunding towards measures to better understand and curb this epidemic.

In the same chapter, non-maleficence was looked at as the avoidance of harm, thus purposefully not acting in a manner that may lead to perceived harm. The dual loyalty controversy was discussed and how the forensic doctor can avoid harm not acting with partiality and bias. Many authors wrote about this subject of conflicting interests, ranging from war crime deaths to “death-in-custody” cases (Tarboda and Arboleda-Flórez, 1999; Thomsen, 2000; Matejić and Otasević, 2010; De La Grandmaison *et al.*, 2006; Pont *et al.*, 2012). The topic of research and the deceased was also highlighted, with a focus on avoidance of harm in this area too.

Lastly, I evaluated the influence of the media and the potential for harm to be caused. The importance of not divulging sensitive medico-legal information to the media, without regarding the deceased and their family, was essential. Our current society’s fascination with death may

contribute to the media hunger for information, especially in unnatural deaths leading to criminal investigation when the famous are involved. Numerous important examples were discussed where harm ensued as a direct result of media influence.

The last principle of discussion, in chapter 9, was autonomy. The lack of consent to a medico-legal autopsy, including the deceased's lack of any decision-making capacity, made this an interesting principle to try and utilise in this thesis. Symmetry, respecting confidentiality, and consent were some of the topics discussed under autonomy. With symmetry, I tried to show that some interests remained the same to the deceased as when they were alive. Examples included interests in privacy, reputation, bodily integrity, religious and cultural beliefs as well as property interests.

The importance of upholding confidentiality of the deceased was reiterated by the HPCSA: "*Health care practitioners still have an obligation to keep personal information confidential after a patient dies. The extent to which confidential information may be disclosed after a patient's death will depend upon the circumstances*" (HPCSA booklet 10, 2008, p.10). One of the circumstances that may require divulging information is in the case of medico-legal autopsies. Possible cases where confidentiality became an ethical concern were discussed, such as with HIV and narcotic use.

Consent and the deceased was an interesting discussion, as the deceased is not able to consent post mortem. Much of the "consent" aspects were delegated to involving the family, especially in research and organ donation scenarios. The ante mortem autonomous decisions of the deceased, such as a will or advanced directive, were also looked at. The extent and limitations of specific consent was deliberated, such as use of the cadaver in teaching and even post-mortem gamete retrieval.

Overall, the thesis showed moral status can be attributed to the deceased based on several moral status arguments and other considerations, such as cultural and religious beliefs and applying symmetry. It was demonstrated that ethical issues do indeed exist in the forensic medicine sphere. The principlism framework was proposed as a workable option to analyse ethical concerns in the medico-legal environment. Illustration of forensic medicine ethical dilemmas thoroughly discussed the four principles of justice, beneficence, non-maleficence, and autonomy. The framework worked well in relation to the principle of justice, as forensics is so intricately linked to the judicial system. All the principles contributed valuable insight into a variety of forensic matters, ranging from research and the deceased to expert testimony in court. I barely touched the surface of some of the ethical issues identified and each could be explored in much more detail. This is beyond the scope of this master's thesis but promising for future exploration.

10.2 Future explorations and recommendations

As I mentioned above, this thesis has opened the prospects of much more deliberation about ethics and forensics. The possibilities are numerous. The need for frequently updated practical guidelines are important, where a lack of can lead to unethical practices. Then specific ethical code of conduct in forensics also needs attention. In the ethical code awareness of the myriad of dual loyalty situations is important. Attention to respecting ante mortem wishes, such as advanced directives and their role in forensics while upholding bodily integrity all need to be discussed in such an ethical guideline. These ethical orientated guidelines need to address issues such as consent and laws governing the practice, family influence and confidentiality to mention a few. The virtuous characteristics of the forensic doctor is also good to allude to such as honesty.

National standardised protocols to deal with certain forensic issues, such as SUDI and even SUDA deaths, needs to be sought. A draft of the updated National Guidelines for Forensic Pathology Practice is currently circulating, but not finalised yet. The recent amended Acts will be

updated in the guide. Even the new guidelines are medico-legal practice orientated and not a code of conduct or for addressing ethical concerns primarily. The need therefore still exists for specific ethical guidelines that will govern the forensic medicine field. This, of course, needs to be done in accordance with international guidelines and standards as well as incorporating the budgetary constraints.

My concern is that if there are no uniform guidelines to guide forensic doctors on specific topics, such as requirements to be done in each SUDI case prior to SIDS diagnosis, then there will always be possible unethical practices. If the same approaches are not used nationally, then obviously the cause of death conclusion will not necessarily be unanimous. This can lead to underdiagnosing and inaccurate national statistics. This again influences fiscal allocations and, in effect, less funds may be available for forensic investigation, and even possible research. It can also, directly, and indirectly, increase harm to the grieving family if a diagnosis is not made. Many families may prefer knowing their infant died of a genetic abnormality rather than from SIDS. The “diagnosis” of SIDS seems like an intangible and difficult to comprehend conclusion, leaving too many questions without answers. Many of these guidelines may be more practical than ethical, but without standardised practical guidelines the possibility of unethical dilemmas may be more.

This conundrum was emphasised in the conclusion of an article by Du Toit-Prinsloo *et al.*: “*This study clearly indicated that the admission criteria and investigation of SUDI’s differs amongst different centres. An explanation could be that there are currently no nationally standardized or prescribed protocols for death scene investigation, autopsy and ancillary investigations in medico-legal practice in South Africa. A standardized approach to classification of the cause of death would probably also improve our ability to meaningfully compare research findings nationally and internationally.*” (2013, p.350).

Another aspect that was highlighted in respect of uniform national institutional guidelines would be in relation to the **retention of tissues and larger, emotive organs** such as hearts and brains. The post mortem harm that was caused by retention of organs without the awareness of the living relatives, especially to the parents, was well emphasised throughout the thesis. The smaller microscopic samples retained did not have the same significance as the larger organs seemed to have (Jones, 2003). The quotation by Jones (2003) in Chapter 7 is an excellent summary of the pressing need to scrutinise the regulation of the retention of tissues, even when legally endorsed: “*While respect for human material should be universal, regulations governing its retention and use should be most demanding for brains and hearts, and least demanding for tissue blocks and histological slides.*” (Jones *et al.*, 2003, p.346). The assumption currently exists that all samples retained for the purposes of the medico-legal autopsy, as sanctioned under the Inquests Act, in some way absolves the forensic medicine facilities of ethical accountability towards families, which is not the case. The law cannot be used as an excuse, especially when larger organs are retained within our culturally rich and religiously diverse rainbow nation.

My suggestion is to only retain larger organs if essential to the legal case or diagnosis. For all larger organs that are retained, standardised operating protocols need to be in place. These Standard Operating Procedures (SOP’s) should include informing the family when organs are retained, as well as including an option of returning these to the family, if the family so wishes, once the medico-legal investigation is finalised. The policies need to incorporate the environmental aspects of the formalin-fixed organs needing cremation as opposed to burial. This may be problematic to the family from a religious or cultural viewpoint. Much discussion is needed to find the best approach to this problem.

On the matter of tissue samples retained for identification purposes, the discussion of national, and even international, **DNA databanks** is essential. Our own South African National Forensic DNA Databank and its accompanying Act (Government Gazette, 2014) is still in its infancy. Meintjies-Van der Walt (2011), prior to the Act's promulgation, noted that the cost to maintain such a databank effectively, from a central governance perspective, is still a concern in our resource limited country; how much more international collaboration. The advantages of internationally linked databanks for identification purposes are obvious, especially with the number of migration happening globally. Giardina *et al.* (2011) and Nuzzolese (2012) discussed some of the aspects to consider, which include countries' differing laws of governance related to the management of these databanks. Accountability and maintenance of these databanks are also important. The importance of privacy of individuals as to the genetic identifying factors is a further consideration.

When conducting **research in the deceased** it is important to regard the deceased as vulnerable due to lack of consent. The dead cannot speak for themselves. It is therefore essential that all research conducted on the deceased in the medico-legal mortuary should be cleared by an ethics committee as a bare minimum requirement. As mentioned in chapter 9, the NHREC guidelines, in accordance with the NHA the issue of research on biological tissues retained from the deceased (2015, pp.30-33). In most of the forensic cases where biological tissues are collected, it is for diagnostic purposes to aid in the determination of the cause of death. This would avoid harmful research, such as in the case of Christina Arnaud mentioned in chapter 8. The deceased can be a valuable source of information, and ethical research conducted can greatly benefit the deceased's family and the greater community. This research has the potential to identify trends and enhance national and even international collaboration. Genetic studies, for example, in SUDI cases, sudden cardiac deaths and drowning cases, may prove to be important and lead to the incorporation (resource allowing) of these methods into routine standardised autopsies. This directly leads to enhanced diagnosis and can alleviate grief in the surviving family, or even save a life of a living sibling who can be tested for the genetic mutation as well. As authors Michaud *et al.* said; "*It is, however, impossible for forensic pathologists to ignore genetic diseases among the causes of death*" (2009, p.717). Hopefully many more cost-effective genetic tests will be available in the future. The authors also mentioned the possibility of retrospective analysis on tissue samples retained, once more affordable genetic tests are available (Michaud *et al.*, 2009). This is something which requires much more thought in our forensic context as this is not yet incorporated into our current legal framework and will need to filter down to institutional forensic policies as well. South Africa can utilise UNESCO's *International Declaration on Human Genetic Data* when considering research on the deceased, in conjunction with our current judicial system: "*The aims of this Declaration are: to ensure the respect of human dignity and protection of human rights and fundamental freedoms in the collection, processing, use and storage of human genetic data... in keeping with the requirements of equality, justice and solidarity, while giving due consideration to freedom of thought and expression, including freedom of research; to set out the principles which should guide States in the formulation of their legislation and their policies on these issues; and to form the basis for guidelines of good practices in these areas for the institutions and individuals concerned.*" (2004, p.6)

A further discussion ensued concerning **secondary research on samples**, such as those obtained during mass disasters. Once the original purpose of the material, such as DNA identity determination, is completed, what is the possibility of using these stored samples for secondary, unrelated research? Knoppers *et al.* examined this avenue of research and aptly stated that "*no further research be undertaken without an explicit, written consent...ethical review would need to determine whether the harm caused through the act of re-contacting living relatives (e.g. invasion of privacy, rekindled grief) outweighs intended scientific benefits or even social benefits to the*

relatives (recognition of altruism, social utility etc.) before such research is undertaken (2006, p.362). They concluded that the only ethically-justifiable research from biological materials would be research related to improved techniques for DNA identification, or when related to identifying dangerous pathogens or environmental toxins to enhance public safety and prevent fatality (Knoppers *et al.* 2006, p.362).

A few considerations in terms of **notifiable diseases**, specifically TB, were also explored. Once again, the need to have institutional SOPs, which give guidance as to these notifiable diseases in forensic issues, is important to revisit. It was apparent from the thesis that not all notifiable diseases were always notified in the forensic context, as illustrated by co-TB infection in unnatural deaths. It has been estimated that within a single year, 10 million people will fall ill from active TB (CDC factsheet, 2016) globally. Our regional numbers estimate that 33 000 will die from the active disease in South Africa alone (Stats SA, 2017). Retrospective research as to the amount of TB in unnatural deaths is vital to determine statistical significance. Future research involving collaboration between national institutions and even various institutional departments is a possibility.

General retrospective studies of SUDA cases at many medico-legal mortuaries would also be useful in determining the need for preventive and informative programs within local communities where lack of understanding, and possibly even access, increases the number of SUDA cases at the forensic centres. In a local study, at Tygerberg medico-legal mortuary, an unexpected large percentage of SUDA deaths were still attributed to TB (Tiemensma and Burger, 2012). Even the authors were surprised since this is a chronic disease not associated with an expectation of sudden death. This shows that there may be a lack of understanding of the disease profile in the community, as well as well as ignorance of the importance of relevant TB symptoms by household members. It would be interesting to see the prevalence of TB in other South African medico-legal mortuaries, given the epidemic proportions in our country. Prospective studies are also feasible, such as in MDR/XDR diagnostic sampling of tubercular SUDA deaths. This could also be a predictive measure to determine the prevalence of MDR/XDR among these SUDA cases in forensics. Sharma *et al.*'s important 2017 mathematical modelling study highlighted the global nature of the MDR/XDR TB crisis, emphasizing the essential need for further research, including within the forensic arena. Studies could be done in conjunction with family interviews to see what percentage was aware of the symptomatology of TB. Household screenings may need to be part of an implementation strategy in the SOPs for SUDA TB cases in forensic institutions. Many households may remain unaware of the risk of exposure, especially to children, even of drug resistant forms. This could be invaluable information for TB surveillance programs and prevention programs in general.

What about future considerations in terms of **academic and educational purposes**? How does one prevent post mortem harm, as was the case in the Green Lane Hospital 'heart library' controversy, which was primarily for teaching purposes? Once again, South African law does not say much about uses of retained biological material for educational purposes or for the anonymised research possibilities or for anonymised research possibilities, as mentioned above. As demonstrated in the HeLa cell line of Henrietta Lacks and its tremendous contribution towards science and education, the other side of this was the impact of the retained samples on the family. With the current legal void, the need to have ethical institutional policies in place is essential. These policies should, at a minimum, include the long-term storage of these samples. The decision regarding anonymization is also something to seriously consider in the wake of the soon to be implemented POPI (Protection of Personal Information) Act, which I cannot even begin to expand on in this thesis but is vital for future considerations. The teaching of post graduate forensic

registrars with retained microscopic samples is important, but needs to be set out in departmental SOPs, which at the minimum aim to still maintain the dignity of the deceased. Take, for example, a clear microscopic slide showing neuro syphilis in brain tissue. Maintaining the anonymity of the deceased from which this slide was taken is essential to uphold the deceased's dignity and privacy.

Future considerations must include **minimal invasive autopsy techniques**, such as post-mortem sampling, and even discussions around virtopsies¹². In a small percentage of cases referred for medico-legal investigation, such as the SUDA and SUDI cases, these options of obtaining a diagnosis may negate the need for a more labour intensive invasive autopsy and yet still deliver accurate diagnosis. As explained earlier in the thesis, a limited autopsy (post mortem examination) can be done in these cases once foul play and external injuries causing suspicion are excluded, and in keeping with the background history and police report. Adding a minimal invasive technique may confirm the presumed diagnosis. Many more studies of comparison are necessary before more can be said about this. These techniques may have a place in specific medico-legal investigations and could aid in upholding the body integrity of the deceased, which may be important from a cultural or religious viewpoint, while still meeting the legal requirements. Much more discussion around this topic is needed before policies and guidelines can be drawn up to accommodate these.

Foltyn concludes his article by referring to the “*art of dying*” that we have lost in our modern age. Trying to understand death and dying has partially led to the structured forensic investigation, which can hopefully alleviate some of the uncertainties. I end this thesis with Foltyn's words:

“The Ars moriendi”, the ‘art of Dying’ instructions, common in the European Middle Ages, has been largely lost...The foundation of Western religions and of Western philosophy stems from the contemplation of death, the problem of mind and body, and body and soul, and what happens after we die... where uncertainty about what happens after we die is apparent, the fear of death is managed, to a degree, by extending control over the corpse through dissection. Perhaps the intensity of our hunger for scientific truth and certainty regarding the causes of death explored in forensics television and the mysteries of the demises of the dead famous, is related to our continued trepidation about death, a fear that arguably has increased as secularism pushes aside traditional religious convictions about the afterlife. Whereas before medical and forensic science there was mostly doubt and indeterminacy regarding problematic deaths, science offers more certainty.” (2008, p.170)

Perhaps forensic medicine can form part of the larger canvas of life, by not merely examining death, but incorporating the deceased and all that they represent into the medico-legal autopsy. “A person might not care very much about something prior to thinking it through, but come to feel differently once he has thought it over” (Rachels, 1980, p.38). I hope I have been able to provide thought-provoking arguments that make the reader feel differently about raising ethical issues regarding the dead.

¹²Virtopsy® is a virtual alternative to a traditional autopsy, conducted with scanning and imaging technology.

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