CHAPTER 1

IN THE BEGINNING

Is death ever preferable to life? Asking that question may say something about a society needing to define its priorities so that individuals have some ground rules for how we are expected to live together in that society. The question may also represent an individual's quest to determine how high a value he will put upon life, both in terms of his own life and other peoples lives for which he may be given responsibility by society. An example is when a duty of care is established between a doctor and a patient.

Life and death issues will present themselves in many aspects of a society's functioning and are the most basic issues that a society has to face. All the other decisions that a society makes about how its individuals will live together are predicated upon those individuals being alive. Conversely, attitudes that society has towards other issues may impact upon its decisions regarding life. For example, does the fact that our society treats many old or broken commodities as disposable, impact on attitudes to life?

For some societies the survival of the community may be the motivating consideration. The well cited stories from the early 1900's of the Eskimos who lived inside the Arctic circle practicing female infanticide because priority was given to sons who would become hunters and providers, or of leaving the elderly in the snow when they were unable to keep pace with the tribe's migration in search of food, were practices designed to ensure the survival of the community[1].

In our society issues of death become prominent from time to time. A good example is capital punishment. This is considered the ultimate form of punishment, not, I suspect, because of the suffering it causes, since various tortures cause far more suffering than quick executions, but because of its irreversibility. We are powerless to reverse death, which is partly why we are in awe of it and mostly fear it. Irreversibility means that before making the decision to take the life of another, we would want to go beyond reasonable doubt, to having no doubt about the correctness of the decision. Even then, in the Judeo-Christian ethic we may ask whether life is ours to take.

The other great societal debate is over euthanasia. Similar questions apply. Are there any options left for making life meaningful prior to death, since death will close all further of life's options?

The public discussions on death issues are difficult. They often occur at highly emotive levels between people with strong convictions, who fail to actually engage each other in debate. Yet, on both sides of the euthanasia issue, there are good arguments that must be refuted or defended if they are to be persuasive. I will explore many of these arguments.

Many people will not participate in discussions centring on death. Many of my patients being treated for cancer have some of their most difficult moments dealing with the reactions of others people to their diagnosis. They invariably report that some friends or relatives ignore them. Death has come too close to home and rather than be faced with their own mortality, these friends and relatives avoid the discomfort it brings them. In the public debates on topics of death, people are also able to distance themselves from participation. One manifestation of this is the "medicalisation" of the euthanasia debate. In most euthanasia law reform proposals it is assumed that the doctors will be part of the decision about the suitability of a candidate for euthanasia and will be responsible for providing euthanasia for the individual concerned. This may be rooted in the involvement of medical practitioners in the definition of death, as I will discuss. I am not suggesting that it is an unreasonable proposal but simply that it removes the rest of society from the personal impact of the nature of the decision being made and executed. It is also possible that medical practitioners involved could shield themselves from the magnitude of what they are doing by focussing on the procedural aspects of the process rather than the moral dimensions.

In many cultures, and in past years in our society, much of the education and discussion about death occurred within the nurturing environment of organised religions in the context of wider spiritual education. With less of the population now actively involved with religious groups, the discussion about death has spilled more into the social and political arenas. However, many burial rituals and the respect shown to the dead are still part of secular society and I will discuss possible interpretations of these.

I have suggested that individuals often bring strong views to discussions of life and death issues. It is therefore reasonable that I should declare my motivation for exploring whether death is ever preferable to life. Firstly, I approach this from the perspective of a practising medical oncologist and director of a cancer centre. In that role I have had the privilege of sharing the experiences with thousands of patients who face a diagnosis of cancer which will change the planning of their lives and may confront them with the prospect of a premature death. I have been inspired by how they value each day of their remaining life. It is the marriage of this day by day practical perspective with the more formal philosophical commentaries on issues of life and death that is the main aim of the ensuing discussion. I have attempted to keep it focussed on the practical consequences of the bioethical positions held.

Can an individual commentator take a neutral value system into such a discussion and act as a detached observer? I do not believe so. I have alluded to this in chapter 4 on autonomy, where to assess whether an individual's position is truly autonomous one may have to decide whether he has truly internalised the values he expresses or whether they merely reflect the subtle coercions of his upbringing,

education or the values of the society which surrounds him. I bring to my reflections on life and death issues a traditional Protestant Christian background with its reverence for life based on the relationship with the Creator. However, I do not believe that the public debate is advanced by arguing from a particular belief system since it will soon reach a position where there is no common ground. I therefore accept the challenge of defending a position on the value of life using rational secular argument that could serve to strengthen a position held by faith, or force a modification of that stance. I recognise that views on life and death issues change with age and experience. I have observed that my older patients are more circumspect about treatment options that offer only modest impact on the duration of life. Indeed, my standard reply to the question from older patients seeking to know what I would do in their position, hinges on the different perspective of having less experience of life and greater expectations of life in the future than they may have.

DEFINING DEATH

I will commence the next chapter by discussing the definition of death. I could have started with trying to define life, but the real purpose of the exercise is to explore the boundary between the two. We will need to separate the concept of when we are dead from the criteria used to judge death.

Society's concept of death is dynamic, but it is only relatively recently that it has had to examine and modify long held views. There was a simplicity about a notion that you were dead when your heart stopped. This combined a concept of death with a criterion for death that the man in the street could understand. The advent of assisted ventilation and cardiac pacing changed all of that. There also became a need for organs for transplantation, which required that the organs remained perfused for as long as possible so that they were viable when removed from the donor, prior to the transplant. Society began exploring a brain centred concept of death[2]. This is a difficult transition since there were traditional views of the value, even sanctity of life, which created discomfort when a degree of arbitrariness was apparent. Is there anything unchangeable about the concept of death? One unchangeable feature is its irreversibility.

The need to re-examine the definition of death forces us to think about the characteristics of human life. The philosophical concept of death being the loss of personhood perhaps fits best with a brain centred definition of death, but to practically apply this requires some correlation with dysfunction of either the whole or specific anatomical areas within, the brain[3]. Certainly this will be necessary if we are to develop criteria by which we can judge irreversibility.

Counter-intuitive anomalies arise if we focus on the function of a single organ to define death. I therefore wish to introduce the concept of a hierarchy of organ deaths. The death of each organ could be arbitrarily assigned a meaning for how society could treat an individual following the death of that organ, until such a time as there would be a general acceptance that a body is dead. Then, society's rituals surrounding respect for dead bodies can guide our behaviour.

CHAPTER 2

THE DEFINITION OF DEATH

Researching the question of whether death is ever preferable to life necessitates first exploring the definition of death. It is helpful here to separate the philosophical concept of death from its social and moral consequences and the criteria used to diagnose it. The debate over the definition of death centres upon the difference between a traditional definition based on the cessation of heart and lung function and a more current concept of whole brain, or even just upper brain death. This has developed following technological progress in resuscitation that has enabled re-starting of a heart that has stopped beating and prolonged support of lung function by mechanical ventilation.

At the same time, the techniques for transplanting human organs were being developed and as the success rate, first with kidney and later with heart transplants, became higher the procedures moved from being investigational to being considered standard treatments for conditions such as chronic renal failure or end stage cardiomyopathy. This has increased the demand for perfused donor organs for transplantation. In turn, it has created a pressure for not only a more precise definition of death but for a redefinition of death, which is brain rather than heart-lung centred. If traditional heart centred views of death were to be maintained, and the circulation had to cease completely before an organ could be removed or artificially perfused, successful heart transplantation would be very difficult. Although it is possible to consider non-heart-beating organ donation, there would at least be a greater risk of irreversible damage to other donor organs[1]. A solution would be the acceptance that organ harvest was allowable from a "living" donor who was brain dead even though the procedure would end the donor's life. If the concept of brain death being the death of the donor became accepted, this moral dilemma is avoided since the circulation could be being maintained after the individual was dead.

Death is a process of progressive organ failure rather than an event at a single point in time. Indeed, technological advances have allowed us to consider the body organ by organ. Morison uses this biological viewpoint to criticise those who seek to "introduce artificial discontinuities into what are essentially continuous processes"[2]. However, there is a need for a physician to employ certain criteria to be able to certify death at some point because there is also a need to establish a point

when the moral, legal and social obligations demanded of a living person and the similar obligations of others towards that person can change to those appropriate after death.

Society has traditionally accepted that an individual is dead when a medical practitioner pronounces him as dead[i] . This possibly explains why discussions of death are often placed in the medical arena. Certainly the criteria on which the physician will make a decision are a matter for medical debate and require refinement if the definition of death changes from a heart-lung centred definition to a brain centred definition. Technological advances will be required to make the accuracy of the assessment greater in a brain centred definition since it is less accessible to physical examination.

David Lamb states, "The only satisfactory concept of death is that which trumps other concepts of death in so far as it yields a diagnosis of death which is beyond dispute"[3]. Is there a common feature of the definitions of death? Irreversibility is essential. There is no sense in which a human being can be declared dead and then become alive again. This is despite the confusion caused by common usage, in colloquial language, of expressions such as being 'brought back to life' after being clinically dead or a dead patient being 'kept alive' by a ventilator. The concept of the irreversibility of human death is assumed even in Christian teaching in that the Resurrection of Christ is regarded as miraculous.

However diverse the criteria used to define death, irreversibility has been common. The Harvard committee set out to "define irreversible coma as a new criterion for death"[4, 5]. The Law and Medicine Committee of the American Bar Association stated that, "For all legal purposes, a human body with irreversible cessation of total brain function, according to usual and customary standards of medical practice, shall be considered dead"[6]. Julius Korien talks of brain death as "irreversible destruction of the neuronal contents of the intracranial cavity"[7]. David Lamb defends a concept of death as the "irreversible loss of function of the organism as a whole"[8]. Capron and Kass and later the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioural Research suggested dual criteria but both encompass irreversibility, that is, irreversible cessation of circulatory and respiratory functions or irreversible cessation of all functions of the entire brain[9,10].

Because of technological advances in organ support, the concept of irreversibility must also embody the notion of irreplaceability. For example, dialysis can replace kidney function and so that loss of this organ is no threat to the rest of the organism. Korien argues that it is the irreplaceability of the brain that makes it the critical system[11]. The brain is the site where personal identity resides and this is irreplaceable. If we could transplant the brain into another body, the fact that we would consider the person whose brain was transplanted as the individual who is still alive underlines why we consider the brain as crucial. It is more problematic whether one can replace or foresee the replacement of the functions of parts of the

[i] I am indebted to Renee Fox for a discussion of this point (1984)

brain, especially the brainstem, in determining whether this organ has a central role in regulating functions essential to life.

If the functions of the heart and lungs are considered replaceable, this could shift the focus of the definition of death to the brain, unless a distinction is to be made between spontaneous and non-spontaneous function. Schwager, in arguing that the brain death criterion does not alter a heart centred concept of death, maintains that a brain-dead patient on a ventilator does not have a spontaneously beating heart because it is indirectly being supported by the respirator[12]. The difficulty in insisting that there is a difference between spontaneous and non-spontaneous cardiac function is that it implies that patients with artificial hearts are dead. I suggest also that this distinction would be invalid if applied to the brain. If, in future, some of the 'switching' or coordinating functions of the lower brain could be replaced, this should not necessitate an alteration in our concept of death. I see replaceability as just a subset of reversibility.

BIOLOGICAL APPROACH TO DEATH

Let me first consider a biological approach to death, since this will relate to the observable criteria for determining death. This is based on considering the human as an organism. The appeal of this approach, at least superficially, is to attempt to define death by objective parameters and avoid, as Becker puts it "rigging the definition of death" to evade moral dilemmas[13]. Becker attempted a biological definition based on irreversible loss of integrated function, as he argued against a brain death definition. Lamb's 'biological definition' is consistent with using brain death criteria[14]. This demonstrates the futility of believing that an approach to death which is based on the biological loss of function of the organism can yield an unarguable position.

If death is a biological process of progressive loss of organ structure or function then the safest and most uncontroversial concept of death would be the end of the process; total putrefaction of the body. Now to insist on this is absurd, but to establish a point at which death can be declared prior to this means the introduction of external factors such as moral or philosophical considerations of the concept of death.

One further difficulty in a biological concept of death is whether organ destruction and loss of function should be considered synonymous. Byrne argues that the irreversibility of loss of function must be a presumption based on current medical knowledge and availability of life support systems, whereas complete destruction is objective and observable[15].

Heart-lung Death

What was the significance of the heart-lung criteria for diagnosing death? Firstly it was an easily observed event. Secondly, until recently, its inevitable consequence was the progressive death of all of the other organs of the body, including the brain.

CHAPTER 3

DEATH RELATIVE TO LIFE

I wish to explore the consequences of placing life on top of a hierarchy of primary goods in a person's life's plan. There is a precedent for valuing life so highly in many religious and social traditions.

It is not my goal or desire, however, to defend a traditional sanctity of life doctrine, which I regard as an extreme view, therefore I must qualify what I mean by placing life on top of a hierarchy of primary goods. My view, would as a general rule, seek to place life above all else on the hierarchy of the life plan of a person. This requires that life be given the benefit of the doubt when weighed against other primary goods, particularly if outcomes are unclear. It also requires that every possible scenario, which would allow the preservation of life, be explored. This attitude towards life reflects a general desire to place life on top of the hierarchy. I do not, however, wish to make the position inviolable. There maybe specific situations, for example, where it would not be unreasonable to desire a situation which allowed a combination of lesser values to outweigh life, after exploring all possibilities. I will consider examples later but emphasise that these examples would be regarded as specific exceptions despite rigorous attempts to maintain the place of life at the top of a hierarchy of values and as such should not invalidate the general rule. The fact that these cases would be considered exceptions and a scenario allowing death as reasonable could only be reached when all possibilities that allow the preservation of life had been considered, underscores the importance of the general rule and certainly would not allow life to be summarily dismissed. I will demonstrate that such exceptions would be rare and would never mandate the taking of a life. In exploring the consequences of placing life on top of the hierarchy we will see if this position, as defined in the above way, is defensible.

I believe that an alternative quality of life doctrine, which leads to choosing death over a life of poor quality, involves assumptions that are poorly based. I need to explore this view to determine whether one needs to make greater assumptions in a quality of life doctrine than one would make in taking the position that in general, preserving life should be valued higher than anything else. We are required to explore issues such as whether the value of death can be rationally compared to values placed on life. The nature of life itself and the limitation of our ability to control it may, for example, warrant our respecting it per se. Questions relating to an

individual's right to make an autonomous decision to end his life will be dealt with in a later chapter.

THE VALUE OF LIFE

Why should we value life so much as to want to place it on the top of our hierarchy of values? At one end of the scale, attempts could be made to objectively measure the value of the lives of persons based upon their interaction with those around them and their contribution to society. It is beyond the scope of this discussion to explore the difficulties in constructing tools for such measurements and validating them. The question that we need to address is whether human life, per se, has been thought to have a value.

Both Eastern and Western traditions place a high value on life. Eastern religions, such as Buddhism and Jainism believe that all life is sacred, whereas the Western tradition focuses on the sacredness of human life[1]. From the Judeo-Christian viewpoint, man was made in God's image. Judaism attributes an infinite value to every human life.

A meditation from a Jewish prayer book:

> "May I become ever more conscious of my dignity as a child of God, and may I learn to see the divinity in every person I meet. Then indeed shall I come closer to God and grow in His likeness"[2].

Pope John Paul II in a paper on Euthanasia expressed the value of human life:

> "Human life is the basis of all values: it is the source and indispensable condition for every human activity and all society. While the majority of human beings regard life as sacred and maintain that no one can dispose of it at will, the followers of Christ see it as being something more excellent: a loving gift from God, which they must preserve and render fruitful. This further consideration entails certain consequences--- all human beings must live their lives in accordance with God's plan.---Intentional death or suicide is just as wrong as is homicide. Such an action by a human being must be regarded as a rejection of God's supreme authority and loving plan."[3].

The value of human life in this context comes from it being God given and God valued.

Other philosophers have expressed the view that human life has a high value in non-theological terms. Aristotle centred human uniqueness upon rationality, a feature that set humans above animals[4]. This uniqueness is not valuing human life per se but is more akin to considerations of personhood in my discussion on the definition of death.

Immanuel Kant viewed humans as having an intrinsic worth, or dignity. He also based this on their rationality that enabled them to make moral decisions. He reasoned that since moral law was based on reason, only rational beings who could comprehend this and decide to act upon it could embody moral worth. Humans, by being able to value things, gave those things a value that they do not intrinsically possess, in addition to being a means to human ends. Humans, however have the highest worth and therefore are to be treated "always as an end and never as a means

only", a formulation of his ultimate moral principal which he called The Categorical Imperative[5]. He gives practical examples of the consequences of his position.

> "First, according to the concept of necessary duty to one's self, he who contemplates suicide will ask himself whether his action can be consistent with the idea of humanity as an end in itself. If, in order to escape from burdensome circumstances, he destroys himself, he uses a person merely as a means to maintain a tolerable condition up to the end of life. Man however, is not a thing, and thus not something to be used merely as a means; he must always be regarded in all his actions as an end in himself"[6].

It is not my purpose, in this discussion, to defend these viewpoints. The purpose of quoting such examples is to demonstrate that to place the highest value on human life has a broad religious and philosophical precedent. My interest is to explore the consequences of placing life at the top of the hierarchy of goods that we value, in the way that I have previously defined, when considering the desirability of life compared to death.

What I wish to present are some general arguments which could be used to support placing the highest value on life, before analysing specific examples where other considerations may challenge life holding such a pre-eminent position.

THE INABILITY TO CREATE LIFE

There is an important aspect of life that I intuitively feel warrants our placing it highest on our list of what we value, and that is that we cannot create life where no life exists or recreate life once death has occurred. Now I specified where no life exists because we cannot create life from inert material. We can obviously create life by in vivo sexual union or even in vitro, when a sperm fuses with an ovum outside a living body. However, we are starting with living cells. We cannot start from non-living material.

Using an argument based on our inability to create life to support preserving life must be considered in terms of life in general and the life of an individual. The arguments for life in general are more biochemical in nature. The irreplaceability of an individual life comes from the uniqueness of the subjective experiences that each individual has and values. In many ways, the argument for an intrinsic value to life is more convincing when argued on the basis of the inability to replace individual lives and is the situation which I wish to highlight, but let me start with life in general.

In a technological age, where we have gained control over much of our environment and have demystified many of the processes of nature and of living organisms, we remain in awe of the creation of life. We have learned to prolong the functioning of malfunctioning organs, or even to artificially replace the functions of organs to sustain life in the rest of the body. We cannot stop death from occurring, we merely at best delay it. We can artificially recreate the conditions in which a sperm enters an ovum to create a unique individual but we remain powerless to initiate the "spark of life". We cannot start from nucleic acids and proteins and build a living cell. We have control over most aspects of our life except over life itself.