Matters of Life and Death

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Dedication

FROM DR. BRAD HARRUB

To my parents and my brother Calvin N. Harrub III Catherine T. Harrub Kevin N. Harrub who suffered through many "matters of life and death" with my late brother Calvin N. Harrub IV, who was truly a lamb among wolves (Luke 10:3)

FROM DR. BERT THOMPSON

To all those parents who chose adoption over abortion, and who, through so doing, blessed not only the children who received the gift of life, but also the future adoptive parents, who were able to teach and mold those children "in the nurture and admonition of the Lord" (Ephesians 6:4)

In the deepest possible gratitude-as one of those adopted children

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-lapter 1

Introduction

[by Brad Harrub]

Having worked in a hospital environment for several years, I found a great deal of comfort in the familiar sights and smells of health-care facilities. The endless hallways of that major medical center were filled with the tones of IV pumps going off, and the constant overhead paging-just an everyday part of life. It would be here that I would have my first close-up experience with death as I watched a young man's brain pressure reach deadly figures. I stood by silently as his body drew in that final breath, and then waited anxiously for him to take another, only then to realize the finality death brings. Over the next couple of years, I witnessed many more deaths and tragic situations. I would watch families fall against walls as they were literally torn apart by an unexpected loss of life. Those walls that gave support to the ones who were mourning would be the same walls that days, or sometimes even hours later, would be covered with tears of happiness as diseases were cured or families found themselves rejoicing over successful surgeries. Emotions ran the entire gauntlet within the hospital, and, as employees, we were not immune. I still can recall the elation and awe I felt watching childbirth for the very first time during my stint on the labor and delivery floor. But just one floor up holds memories of the pain and sorrow I felt when a 7-year-old patient (with whom I had occasionally tossed a rubber ball) died of complications from AIDS. Yet neither those invaluable experiences, nor the comfort I felt in the hospital setting, was able to prepare me for what lay in store for **my** future.

On a Friday afternoon, my mother received a phone call informing her that my oldest brother, Calvin, was in a coma. He was only 24 at the time. She and I immediately proceeded to the hospital, only to discover that he was in the intensive care unit—shaking uncontrollably and burning up with fever. Our anxiety was only heightened when no one could explain what was happening. What had caused this sudden illness, and what was being done to treat it? Less than 48 hours earlier, my brother had been strolling around, going about his normal walks of life. That vision of him seemed light-years away, as my mother and I tried to quickly take in the chaotic situation around us. I still remember watching an endless stream of doctors—specialists from various fields—look over his chart and order additional tests. Yet no one could offer any idea of what was happening.

Suddenly, I found myself doing what I had watched so many other families do in the past. I was making phone calls to family and friends. I was eating whatever food I could find in the hospital vending machines. And I was watching the hands on the clock slowly tick forward. My father happened to be out of the country when my brother went into the hospital, and so it took the better part of the afternoon to track him down. When I finally was able to speak to him, he wanted to know every detail regarding Calvin's status. We talked about what was being done, and what action the doctors should be taking. As we finished our conversation, he asked me to do whatever it took to get my brother to another, more state-ofthe-art hospital-the hospital in which I had worked so many nights. By this time, we had learned that my brother was accidentally given a medication to which he had an allergic reaction. This anaphylactic reaction already had caused his temperature to spike to 106°, and now we were being told that many of his internal organs were shutting down. We realized very quickly the seriousness of the situation, and knew that from that point on, every decision was literally a matter of his life or death.

My brother stabilized long enough for us to get him transferred. I remember following the ambulance across town to the hospital where I had spent so many hours. And yet on that occasion, when I entered through those sliding doors, I found myself on the other end of the spectrum. Suddenly, the waiting rooms were full of friends and relatives instead of faceless strangers. I listened intently to the overhead paging system for some sign of my brother's condition. It felt as though we had been thrust on some fast-moving roller coaster, and I was desperately searching for a way to stop the ride, or at least pause it long enough for me to comprehend what was going on.

At some point during the chaos, it became obvious that we were incredibly ill-prepared for this situation. Would my brother want to be placed on a ventilator? Was he an organ donor? Did he have a living will? Sitting in that waiting room with my mother and my other brother (the twin to the one in critical condition) made me realize just how poorly prepared most people are for making crucial decisions. Oftentimes, many of the toughest decisions in life are made within the confines of a hospital waiting room, under enormous amounts of stress and pressure. Various family members offer their beliefs and opinions as the options are weighed and the doctors are consulted. Friends of the loved one try to recall specifics on how the individual wanted to be treated.

Finally—often with tear-streaked faces—decisions are made, and the family does its best to live with the resulting outcome. But in the haste, stress, and chaos of the situation, sometimes the one source that should be consulted—God's Word—is not. What does the Bible say in regard to these tough ethical dilemmas, and what is His will? That is the primary purpose of this book. It was designed to provide **God's** answers to these "questions of life and death." My co-author, Dr. Bert Thompson, and I sincerely hope that anyone reading this will be able to do so in the comfort of their own living room, without the sights and sounds of a hospital environment to distract them. It is much easier to give full consideration to the magnitude of these decisions when one is not handed a stack of forms that ultimately will determine whether someone lives or dies. However, even if you read as you find yourself in the eye of a medical storm, we hope you will be able to garner some insight as to what God would have you do in such a situation.

As you read this book, we hope you will understand that these are not easy topics to discuss, and as such, they often cannot be answered quickly or easily. We realize that not all situations are the same, and that we cannot deal with every conceivable possibility that might arise. What we have tried to do is look at the broad picture regarding several ethical issues, and then apply God's Word to those issues. It will be up to you, the reader, to examine God's will for your particular situation. This book is not intended to be a definitive discussion of every single life-and-death situation. Rather, it is a broad survey of many principles that firmly establish God's will.

I wish I could tell you that my eye-opening experience at the hospital had a happy ending. Sadly, it did not. After several hours of intense treatment, my brother's body finally gave up. We were spared many tough decisions that day. I often tell people that one of the hardest things I have had to do during my lifetime was to meet my father at the airport and tell him that one of his twin sons had died while he was on the plane. Bad as that was, it still pales in comparison to what many individuals must face, and the decisions they must make. My family was not prepared to make ethical decisions when my brother passed away. I hope that this book will, in some small way, help others be more prepared for whatever decisions lay in store for them in the future.

Addendum

[by Bert Thompson]

The material covered in this book deals with topics of an extremely sensitive nature. Dr. Harrub and I want our readers to know that we did not make the decision lightly to write on these issues. The truth is, both of us have been involved in multiple situations where we have had to make, or counsel others as they made, critical ethical and/or end-of-life decisions. Dr. Harrub lost a brother under such circumstances. I lost a father. My dad, C.A. Thompson, D.V.M., entered the hospital for what should have been routine heart by-pass surgery. However, after the surgery, as he was being wheeled into the recovery room, a blood clot that apparently had formed during the surgical procedure broke loose, hit his brain, and resulted in a major stroke. Almost immediately, he went into a coma, and shortly thereafter experienced whole-brain death -which unexpectedly thrust my mother and me into a surrogate decision-making role regarding his continued hospitalization.

Much of the information presented in this book is offered from the viewpoint of the two authors' combined medical backgrounds. In my case, however, it also is the result of twentyfive years of sitting across a conference table from people whom I have counseled in indescribably difficult situations. I have watched young couples—who desperately wanted to give birth to a child of their own—weep in pain and despair as they recounted the results of the medical tests that documented the physiological problems they were experiencing (and that were preventing them from producing that child). I have wept with parents who have had to make the inevitable decision of taking a dead child off of life support. I have had to stand by those same parents as they signed the paperwork, approving the donation of that child's organs in order to try to save another life.

And so, yes, much of what you read here is the end result of our own personal experiences in these areas. We have had to study diligently in order to prepare ourselves to try to help those who are having to make the journey we already have had to make, or to counsel others in an effort to help them make scripturally based decisions regarding their lives, or the lives of others.

It is our prayer that this material will be of assistance to anyone who one day may find themselves struggling with the same type of ethical situations that we, and so many others, have had to face. If we may be of any assistance to you along the way, please call on us. We are here to serve.

- Chapter 2

Where is God in Times Like These?

The images have now been forever etched into the recesses of our minds. A generation never will forget the pictures of that hijacked plane purposefully nose-diving into the south tower of the World Trade Center on September 11, 2001. Then, before we had time to catch our breath and fully comprehend what was happening, both towers imploded and careened toward the ground-leaving everything for miles around covered in a morose gray ash. As our brains began to calculate the horror of this tragedy, we quickly learned that there were, in fact, other hijacked planes and more victims subjected to flaming rubble. In the blink of an eye, countless individuals lost their lives-some choosing to do so in a calculated attempt to cripple the United States. But the majority were innocent men, women, and children-people who started that fateful day by going about their normal routines, never expecting to take the final step into eternity on that tragic day of September 11.

As news crews scrambled to provide us with the most shocking images and the most heart-rending stories some of us had ever seen or heard, a quiet-but-detectable uncertainty began to ripple through communities in light of these tragic events: "Where was God, and why did He let this happen to so many innocent people?" Had we been forgotten? A semblance of these questions was echoed thousands of years ago by King David, who inquired of God: "Why do You stand afar off, O Lord? Why do You hide in times of trouble?" (Psalm 10:1). The Israelite Gideon lamented: "O my lord, if the Lord is with us, why then has all this happened to us?" (Judges 6:13). During tragedies like the attacks on the World Trade Center towers in New York and the Pentagon outside of Washington, D.C., questions similar to these are heralded from street corners in front of news cameras, but also are whispered through sobs and tears in the dark recesses of private bedroom closets.

The appeal is simple enough to understand: "If there really is a God, then why did so many people die?" Unbelievers often phrase it this way: "If God is a loving God, then why do bad things happen to good people?" This simple question frequently becomes a stumbling block for some individualswho end up making a conscientious decision not to believe in God. Many rationalize it this way: if God can prevent evil, but won't, then He is not good; if He wants to prevent evil, but cannot, then He is not all-powerful. Unfortunately, all too often it is during pain and suffering that we forget that God is in the same place now that He was when His own Son was being maliciously nailed to an old rugged cross almost two thousand years ago. And how thankful we should be that on that grim day, God **did** remain in heaven as the sin of all humanity was placed on His Son's back and nailed to that cross! Had Christ not died for our sins, we would have no hope of inheriting heaven (1 Corinthians 15).

Whatever suffering or hurt we may experience, pales in comparison to that endured by our Lord. We need to remember: **Sunday followed Friday**! Christ's suffering unto death provided an incredible outlet in which we may share. "But God demonstrates His own love toward us, in that while we were still sinners, Christ died for us" (Romans 5:8).

For to this you were called, because Christ also suffered for us, leaving us an example, that you should follow His steps: "Who committed no sin, Nor was deceit found in His mouth"; who, when He was reviled, did not revile in return; when He suffered, He did not threaten, but committed Himself to Him who judges righteously (1 Peter 2:21-23).

In fact, Jesus was

made a little lower than the angels, for the suffering of death... "that He, by the grace of God, might taste death for everyone" and, in so doing, He is able to "bring many sons to glory...for in that He Himself has suffered, being tempted, He is able to aid those who are tempted" (Hebrews 2:9-10,18).

Jesus suffered great hurt and harm, but He endured for us. May we endure for Him! We can and must be like Him. "Yes, and all who desire to live godly in Christ Jesus will suffer persecution" (2 Timothy 3:12).

Thanks to God's incredible love (1 John 4:8), humanity has been endowed with free will (see Genesis 2:16-17; Joshua 24:15; Isaiah 7:15; John 5:39-40; 7:17; Revelation 22:17). God loves us enough to allow us freedom of choice. Thus, all of those responsible for the savage attack upon the World Trade Center and the Pentagon woke up that Tuesday morning with the freedom to choose what they wanted to do or where they wanted to go, for we know that God is "no respecter of persons" (Acts 10:34).

Skeptics are quick to ask why, then, didn't God reach down and save those innocent people? Why didn't He just stretch out His almighty arm and cradle those thousands of innocent lives in the palm of His hand? As odd as it may sound at first, God did not act in such a fashion because He loves us! We live in a world regulated by natural laws that were established at the creation of this world. For example, the laws of gravity and motion behave consistently. Thus, if you step off the roof of a fifteen-story building, gravity will pull you to the pavement beneath and you will die. If you step in front of a moving bus, the laws of motion will keep that bus in motion, even though it will result in your death. But individuals still ask, "Why?" Why could not God intervene to prevent such disasters? Think for just a moment what sort of world this would be if God directly intervened, suspending His natural laws, every time a human encountered a life-threatening situation. Such a scenario would cause indescribable chaos and confusion all over our planet. This chaotic, haphazard system would argue more for atheism than it would for theism!

Where was God when that plane full of innocent passengers slammed into the south tower of the World Trade Center? He was right where he has always been—in heaven, on His holy mountain (Psalm 15:1), with Christ at His side (Mark 16:19), in a place where there is no suffering. We must remember that while we may not understand every facet of human suffering in the here and now, we can explain enough to negate the charge that misery is incompatible with the existence of God. And we must yearn with every fiber of our being to make our permanent abode in those heavenly mansions (John 14:1-3) where "the wicked cease from troubling" and "the weary are at rest" (Job 3:17). God did not forget us on September 11, 2001, just as He did not forget Christ when He hung on that cruel cross of Calvary.

WHY DOES GOD ALLOW SUFFERING?

But why does God allow human suffering? In answering that question, let us make it clear that the Word of God must be used as the main source in this discussion; after all, both the problem and the solution can be found within its pages. Think with us for a moment: Where does the idea originate that God is all-powerful? It does not come from science or philosophy. Rather, the idea derives from passages within the Bible such as Genesis 17:1 where God said, "I am Almighty God," or Matthew 19:26 where Jesus said, "With men this is impossible, but with God all things are possible." And the same principle applies to the idea that God is all-loving (1 John 4:8,16). Unfortunately, when we appeal to the Bible for an answer to the problem of evil, pain, and suffering, some people object. They say that we should not use the Bible, but they do not realize that **they** used the Bible to formulate the problem. After all, if the Bible did not teach that God is all-loving and all-powerful, then this problem would not exist in the first place. Therefore, we can and must use the Bible to find the solution to the problem.

One important point that must not be overlooked is this: after God had finished creating everything, it was very good (Genesis 1:31). However, Adam and Eve sinned against God, and as a result brought pain and suffering into the world. God always has given human beings the right to make their own decisions. He did not create us as robots that have no choice. In Psalm 32:9, King David wrote: "Do not be like the horse or like the mule, which have no understanding, which must be harnessed with bit and bridle, else they will not come near you." God never has **forced** (and never will force) humans to obey Him. He does not want us to be like the horse or mule that must be forced into His service. Instead, He graciously allows humans to make their own decisions. Much of the suffering present in the world today is a direct result of the misuse of the freedom of choice of past generations. Paul wrote in Romans 5:18: "Therefore, as through one man's offense judgment came to all men." Mankind-not God-is to blame for the suffering in this world.

But do not think that **all** the pain and suffering in this world can be blamed on past generations. Each one of us makes wrong decisions and incorrect judgments, and in doing so, we frequently inflict pain and suffering upon ourselves and upon others. Eventually, the young man who decides to "sow his wild oats," will learn that every person reaps what he sows (Galatians 6:7).

Many destitute people have awakened in a gutter because they freely chose to get drunk the night before. Many teenage girls have become pregnant out of wedlock due to poor decisions and lack of will power. And many drunk drivers have killed themselves, their passengers, and innocent victims, because they chose not to relinquish the keys.

All of us must understand that actions have consequences! What we do today can (and often does) determine what our life will be like tomorrow. God will allow us to be forgiven of our sins, but He will not always remove the painful consequences of our actions. Let's face it: **much of the pain and suffering that we experience in this world is our own fault!**

In addition, as we mentioned earlier, God created a world that is ruled by natural laws. If a man steps off the roof of the Empire State Building, gravity will pull him to his death below. If a boy steps in front of a moving freight train, the momentum of the train most likely will kill the child. All of nature is regulated by natural laws set in place by God. They are the same for everyone (believer and unbeliever alike). In Luke 13:2-5, Jesus told the story of eighteen people who died when the tower of Siloam fell on them. Did they die because they were more wicked or more deserving of death than others around them? No, they died because of natural laws that were in effect. Fortunately, those laws are constant so that we can study (and benefit from) them. We are not left to sort out some kind of random system that works one day but not the next.

But sometimes there seems to be no logical explanation for the immense suffering that a person is experiencing. Take the Old Testament character of Job as an example. He lost ten children and all of his wealth in a few short hours. Yet the Bible describes him as upright and righteous. Why would God allow such a man to suffer? James 1:2-3 helps us see the answer: "My brethren, count is all joy when you fall into various trials, knowing that the testing of your faith produces patience." Jesus Christ was the only truly innocent individual ever to live, yet even He suffered immensely. The fact is, pain and suffering have benefits that we often cannot see, and therefore do not appreciate. But God knows what is best for us in the long run. Instead of blaming God for pain, or denying His existence, we should be looking to Him for strength, and let tragedies remind us that this world never was intended to be our final home (read Hebrews 11:13-16). James 4:14 instructs us regarding the fact that our time on this Earth is extremely brief. The fact that even the Son of God was subjected to incredible evil, pain, and suffering (Hebrews 5:8; 1 Peter 2:21ff.), proves that God does love and care for His creation. He could have abandoned us to our own sinful devices, but instead, as stated previously "God demonstrated His own love toward us, in that while we were still sinners, Christ died for us" (Romans 5:8).

Surely, it can be said without fear of contradiction that one of the most frequent, and thus one of the most important, causes of unbelief is the existence of evil, pain, and suffering in the world. But before we explore this concept, let us take a momentary diversion to separate the **genuine** problem from the **counterfeit**. When an individual claims not to believe in God because of the problem of evil, pain, and suffering, the person **making** such a claim may mean something entirely different than what the person **hearing** the claim thinks he means. Allow us to explain.

Admittedly, some people have difficulty believing in God because of what they consider to be **real intellectual obstacles** to such a belief. An *ex nihilo* (from nothing) creation, a virgin birth, or the bodily resurrection of Christ from the dead cause some to consider belief in God on par with belief in the Tooth Fairy or Santa Claus. Such concepts represent insurmountable barriers to the acceptance of God's existence.

Other people, however, face no such intellectual obstacles. Instead, they simply do not want to have to deal with the issue of the ultimate existence of a transcendent God. Their refusal to believe is not based necessarily on "this" barrier or "that" barrier. Rather, belief in God simply is inconvenient at best, or bothersome at worst. In a chapter titled "What Keeps People from Becoming Christians?" in his timely book, *Intel*- *lectuals Don't Need God*, Alister McGrath exerted considerable effort in an attempt to separate the claims of these two types of individuals when he wrote:

"I could never be a Christian because of the problem of suffering" can mean two quite different things: (a) Having thought the matter through carefully, it seems to me that there is a real problem posed to the intellectual coherence of the Christian faith because of the existence of human suffering; (b) I don't want to get involved in a discussion about Christianity, which could get very personal and threatening. But I don't want to admit this, as it might seem to imply that I lack intellectual courage, stamina, or honesty. I can save face by letting it be understood that there are good grounds for my rejection of Christianity. So let me select a problem...suffering will do very nicely. Anyway, it will stall the efforts of this guy who's trying to convert me.

For some, then, throwing intellectual problems at the Christian evangelist is like a warplane ejecting flares to divert heat-seeking missiles. It is a decoy meant to divert a deadly attack. But intellectual difficulties nevertheless constitute a real problem for some people, and answers must be given to their difficulties (1993, pp. 64-65, ellipsis in orig.).

We do not plan to deal here with those in the second category who use the problem of evil, pain, and suffering merely as a ruse to hide their own cowardice in the face of overwhelming evidence regarding the existence of God. Likely, no evidence ever could convince them. Rather, we would like to discuss the unbelief of those who fall into the first category– i.e., people who view the co-existence of God and moral evil as an intellectual inconsistency that is incapable of being solved. Their number is legion, and their tribe is increasing. For example, consider the following assessments offered by a variety of writers that runs the gamut from a Nobel laureate to a former well-known televangelist. The Nobel laureate is Steven Weinberg, author of *Dreams of a Final Theory*, which includes a chapter titled "What About God?" Within that chapter these comments can be found.

I have to admit that sometimes nature seems more beautiful than strictly necessary. Outside the window of my home office there is a hackberry tree, visited frequently by a convocation of politic birds: blue jays, yellow-throated vireos, and, loveliest of all, an occasional red cardinal. Although I understand pretty well how brightly colored feathers evolved out of a competition for mates, it is almost irresistible to imagine that all this beauty was somehow laid on for our benefit. **But the God of birds and trees would have to be also the God of birth defects and cancer**....

Remembrance of the Holocaust leaves me unsympathetic to attempts to justify the ways of God to man. **If there is a God that has special plans** for humans, then He has taken very great pains to hide His concern for us (1993, pp. 250-251, emp. added).

The former well-known televangelist is Charles B. Templeton, a high school dropout who, according to one writer, has "the natural flare and fluidity of a salesman" (Lockerbie, 1998, p. 228). He served for many years as the pulpit minister for the Avenue Road Church (Toronto, Ontario, Canada) where his ubiquitous "Youth for Christ" rallies in the late 1940s were extremely popular. Eventually he became a world-renowned evangelist with the Billy Graham Crusade. Then, one day, he quit. He abandoned it all–not just the Billy Graham Crusade, but belief in God, belief in Christ, belief in the Bible, belief in heaven–everything! He explained why in his book, *Farewell* to God. I was ridding myself of archaic, outdated notions. I was dealing with life as it is. There would be an end to asking the deity for his special interventions on my behalf because I was one of the family.... If there is a loving God, why does he permit—much less create—earthquakes, droughts, floods, tornadoes, and other natural disasters which kill thousands of innocent men, women, and children every year? How can a loving, omnipotent God permit—much less create—encephalitis, cerebral palsy, brain cancer, leprosy, Alzheimer's and other incurable illnesses to afflict millions of men, women, and children, most of whom are decent people? (1996, pp. 221,230).

It is not our intention here to provide an in-depth response to these (or similar) accusations. These matters have been dealt with elsewhere in detail (see Jackson, 1988; Major, 1998; Thompson, 1990, 1993; Thompson and Jackson, 1992). Instead, we merely would like to document the role that evil, pain, and suffering have played, and still continue to play, as an important cause of man's unbelief.

Many have been those who, through the ages, have abandoned their belief in God because of the presence of evil, pain, and suffering in their lives or in the lives of those close to them. Charles Darwin abandoned once and for all any vestige of belief in God after the death of his oldest daughter, Annie (see Desmond and Moore, 1991, pp. 384,386-387). But Darwin was not the only one so affected. Nine years later, on September 15, 1860, Thomas Huxley was to watch his oldest son, four-yearold Noel, die in his arms from scarlet fever. In their massive, scholarly biography, *Darwin*, Desmond and Moore wrote that Noel's death brought Huxley "...to the edge of a breakdown. Huxley tried to rationalize the 'holy leave-taking' as he stood over the body, with its staring blue eyes and tangled golden hair, **but the tragedy left a deep scar**" (1991, p. 503, emp. added). At Noel's funeral, the minister briefly referred to 1 Corinthians 15:14-19 in his eulogy. When he quoted the passage from that section of Scripture which mentions, "if the dead be not raised," Huxley was outraged. Eight days after Noel's death, on September 23, he wrote to his close friend, Charles Kingsley, about the minister's words: "I cannot tell you how inexpressibly they shocked me. [The preacher–BH/BT] had neither wife nor child, or he must have known that his alternative involved a blasphemy against all that was best and noblest in human nature. I could have laughed with scorn" (see Leonard Huxley, 1900, 1:151-152). In the equally scholarly (and equally massive) companion biography that he authored, *Huxley*, Adrian Desmond wrote of the man known as "Darwin's Bulldog" on the day of his son's death:

He sat in the study facing the tiny body. His emotions were unleashed as he looked back to that New Year's Eve 1856, when he had sat at the same desk and pledged on his son's birth to give "a new and healthier direction to all Biological Science." He had found redemption on his son's death. There was no blame, **only submission to Nature**, and that brought its own catharsis (1997, p. 287, emp. added).

"Submission to Nature" became Huxley's watchword. Belief in God-however feeble it might have been prior to Noel's death-now had evaporated completely. All that remained was for him to give "a new and healthier direction to all Biological Science." And so it was to "Nature" that Huxley devoted the remainder of his life.

But not all such events have occurred in centuries long since gone. Modern-day parallels abound. Samuel Langhorne Clemens (a.k.a. Mark Twain) became implacably embittered against God after the death, in 1896, of his favorite daughter, Suzy. Famed English novelist, W. Somerset Maugham, recounted in his autobiography, *The Summing Up*, how that as a youngster he had prayed to God one night that he might be delivered from the terrible speech impediment that afflicted him. The next day he arose, only to find that the impediment still was present. So profound was his grief and disappointment at the failure of God to cure him overnight that from that point forward he pledged never to believe in God again.

In the mid-1960s, a devoutly religious young man from Chattanooga, Tennessee was a role model for all of his classmates. He led a prayer group, and planned to become a foreign missionary—until his sister died of leukemia and his father committed suicide. The boy's belief in God collapsed, and he subsequently became one of America's most outspoken unbelievers, humanists, and pro-abortion advocates. That boy's name?—Ted Turner, founder of world-famous CNN, the Turner Broadcasting System, and other well-known media enterprises.

Time and space would fail us if we were to attempt merely to enumerate, much less discuss, all those who have abandoned belief in God because of evil, pain, and suffering in their lives or in the lives of those close to them. In the end, however, the most important question is not, "Why did 'this' or 'that' happen to me?," but instead, "How can I understand what has happened, and how am I going to react to it?" As McGrath put it:

The sufferings of this earth are for real. They are painful. God is deeply pained by our suffering, just as we are shocked, grieved, and mystified by the suffering of our family and friends. But that is only half of the story. The other half must be told. It is natural that our attention should be fixed on what we experience and feel here and now. But faith demands that we raise our sights and look ahead to what lies ahead. We may suffer as we journey—but where are we going? What lies ahead? (1993, pp. 105-106).

As much as the unbeliever hates to admit it, there **are** times when suffering actually is **beneficial**. Think of the man whose chest begins to throb as he enters the throes of a heart attack. Think of the woman whose side begins to ache at the onset of acute appendicitis. Is it not true that pain often sends us to the doctor for prevention or cure? Is it not true also that at times suffering helps humankind develop the traits that people treasure the most? Bravery, heroism, altruistic love, self-sacrifice—all flourish in less-than-perfect environments, do they not? Yet people who exhibit such traits are cherished and honored as having gone "above and beyond the call of duty." Was this not the very point Christ was making when He said: "Greater love has no one than this, than to lay down one's life for his friends" (John 15:13)?

Instead of blaming God because evil, pain, and suffering exist, we should turn to Him for strength, and let tragedies, of whatever nature, remind us that this world never was intended to be a final home (Hebrews 11:13-16). Our time here is temporary (James 4:14), and with God's help, we are able to overcome whatever comes our way (Romans 8:35-39; Psalm 46: 1-3). With Peter, the faithful believer can echo the sentiment that God, "who called us to his eternal glory by Christ Jesus, after you have suffered a while, perfect, establish, strengthen, and settle you" (1 Peter 5:10).

We can allow pain and suffering to pull us toward or away from our heavenly Father. Rest assured, however—**God** does not move! He will stay by your side throughout whatever decisions or crises you may face. After all is said and done, the question is: What direction will you go. Will you do as scores have in the past, and allow a difficult situation to separate you from your Creator? We hope not, because that—not the present evil, pain, or suffering—would be the greatest tragedy of all.

Chapter 3

Tough Decisions Regarding... Surrogate Motherhood

Blood still occasionally seeps from scab-covered wounds left by the heavy chains that once bound her feet. Her joints ache and burn from the long walk that brought her to this endless farmland. From the first glimmer of morning light, until the Sun dips down below the horizon, this woman is busy obeying the commands of a person to whom she refers simply as "Master." But the most heart-rending concern that is on the forefront of her mind is the secret that she has kept for many weeks—her unborn child. Soon, her body will begin to show the physical signs of pregnancy, and she knows that at some point her master will realize her condition. Her heart breaks at the thought of someone else owning her child, and yet she knows it is inevitable. After carrying the child for nine months, the day will come when she will deliver the baby, and it will become someone else's property.

Scenes such as this one were repeated countless times in America prior to the Civil War. Today, we cannot imagine what those grief-stricken women went through behind all those tears, as they turned over their children, knowing they might never see them again. And yet, even now laws are being introduced in states all across America that once again make this emotional separation a legal reality. Surrogacy is a common practice in the United States today. Years ago, the idea of allowing a perfect stranger to carry and deliver a child, only to give up the child to be reared by someone else, was unknown. Most people still believed the words of the psalmist, who wrote: "Behold, children are a heritage from the Lord, the fruit of the womb is a reward" (Psalm 127:3). That "fruit of the womb" was cherished; thus, few women ever considered giving up a child who had begun a life in their own womb.

The words "surrogate mother" were initially met with gasps and repulsive looks of shock. However, in today's politically correct climate, those words have taken on a new light—that of a compassionate act of altruism. Research indicates that most individuals who serve as surrogate mothers do so to give the gift of life, receive compensation, or purge guilty feelings from having given up a previous child for adoption or having had a previous abortion (Timnick, 1981, p. 1). However, after going through the process, America's first surrogate mother, Elizabeth Kane (a pseudonym) stated:

I now believe that surrogate motherhood is nothing more than the transference of pain from one woman to another. One woman is in anguish because she cannot become a mother, and another woman may suffer for the rest of her life because she cannot know the child she bore for someone else (1988, p. 275).

In her autobiography, Kane discussed in painful detail the gut-wrenching emotions entailed in surrogacy. As she reflected on the events from her own experience, it is interesting to note a comment she made just three short months into her pregnancy. Following an ultrasound procedure, she noted: "Yet the one thing I could not, or would not, discuss with Kent [her husband–BH/BT] was a thought so distracting that I pushed it aside each time it started to wriggle into my mind. I had fallen in love with my baby that afternoon" (pp. 174-175). This was the baby whom she one day would be forced to turn over to a woman who held no genetic ties to the infant. How can a judicial system determine "fair" outcomes for cases in which infertile couples desperately desire children, yet where surrogates find themselves bonding with the life growing in their wombs?

The desire to reproduce has been described as one of the strongest human drives (Paulson, 1995, p. 226). In fact, Richard Paulson suggested that "it is arguable whether the drive to reproduce is secondary to the drive to survive, since it is the essence of life to reproduce" (p. 226). It is because of this drive that so many people are turning to artificial reproductive technology (ART). However, the **desire** for children does not give anyone the right to supersede God's laws. Therefore, any and all ethical decisions regarding the use of ART must be examined in light of God's Word. In trying to defend the ever-changing technology in the reproductive field, Dr. Paulson remarked:

The Bible and other major religious writings forming the foundations of major religious groups were written at a time when assisted reproduction was beyond the scope of imagination. Therefore, there is no explicit prohibition against the use of ART for the purpose of reproduction (p. 227).

Is that true? Are we allowed to do anything we want in regard to artificial reproduction, just because the Bible does not contain the words *in vitro* fertilization or surrogate gestation? What should the Christian's response be to this new, everchanging medical technology? "Well," someone might say with a simple wave of the hand, "the Bible has the answer." Indeed, the Bible **always** has the answer. It is an eternally applicable source of Truth to which we may turn time and again. Isaiah wrote: "The grass withers, the flower fades: but the word of our God stands forever" (40:8). The question is, will we actually take the time to dissect and probe the Good Book in order to discern our responsibility concerning these and many other ethical issues?

Recall the words of the apostle Paul as he instructed the young man Timothy: "All scripture is given by inspiration of God, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness, that the man of God may be perfect, thoroughly equipped for every good work" (2 Timothy 3:16-17). The Bible does indeed have the answer! But if you were to look in a concordance in an attempt to locate the scriptures that deal with such things as oocyte donation, gestational surrogacy, or *in vitro* fertilization, to what passages in the Bible would you turn? Dr. Paulson is correct when he says that these words are not mentioned specifically in the Bible. So the question becomes, how do we know what God wants us to do in matters such as these? The answer, quite simply, is this: we must dig deeply into God's Word–deeper than we have ever dug before–in a dedicated effort to locate those eternal principles that are applicable to whatever decisions we must make in this life. We never will know what God wants us to do until we have searched for the principles in His Word that will guide our decisions in this arena.

Distraught couples arrive at ART clinics with a burning desire to be parents and to have children. Thus, this branch of medicine has set sail on a course intended to make every infertile couple happy, no matter what emotional, physiological, or financial costs are involved. The researchers involved have adopted the attitude expressed by what has come to be known in scientific circles as the "technological imperative"— "if it **can** be done, it **will** be done!" Only in hindsight do individuals come to realize that this attitude has completely jettisoned our moral framework—leaving desperate parents to contemplate whether they are choosing an altruistic and loving act by bringing a child into this world, or whether they are "bargaining with the devil" as their emotional and spiritual framework crumbles around them. Is an eternal soul worth this deal with the devil?

THE FAUSTIAN BARGAIN OF SURROGACY

Consider the following hypothetical situation: A married couple tries unsuccessfully for years to have children. Medical testing determines that both the male and female have physiological conditions that prevent them from producing normal sperm and eggs. The woman also suffers from anatomical abnormalities, which means that her uterus never will serve as a safe haven for a growing embryo. Thus, after considering the options, the couple elects to have donor sperm and egg fertilized *in vitro*, and then placed into a surrogate mother.

The fertilization procedure and the embryo placement go extremely well, and after a few tense weeks, this couple finally hears the words they have been waiting for years to hear. They finally are going to be parents! But things take an abrupt change toward the end of the pregnancy as the stress and strain of many years of infertility reach a pinnacle, causing the husband to file for divorce. The man then claims that there were no children born to the marriage, and that he is not responsible (financially or otherwise) for the child born to the surrogate.

Consider yourself the judge who must hear this case. Who are the real parents of this child? If you consider solely the genetics, neither the couple nor the surrogate has any responsibility. If you consider who carried the child to term, then the woman who had no intent in keeping this infant is suddenly "stuck" with a child she did not intend to rear. While appearing "hypothetical" and far-fetched, this real case involving the Buzzanca family was brought to trial in a California lower court, which was responsible for determining the lawful parents of the child (see Vorzimer, et al., 1998). Prior to appeals and additional trials, the court first concluded that the child had no lawful parents! The child (a healthy girl named Jaycee) was born into this world without anyone. She would be three years old before the courts finally handed down a verdict on exactly who were her legal parents. Think just how far we have come from God's initial command to "be fruitful and multiply" (Genesis 1:28) when we resort to fertility practices where children can be brought into this world without a "legal" parent?

But this one case touches only the hem of the proverbial garment. Consider the consequences of the fertility scandal that occurred in May 1995 at the University of California, Irvine (UCI), Center for Reproductive Health. According to the front page of the Orange County Register, Drs. Asch and Balmeceda, world-renowned physicians and experts in the field of infertility, were accused of stealing eggs and embryos, and of deliberately switching eggs and embryos among patients. As court proceedings continued, it became clear that these doctors stole eggs and embryos from fertility patients and then sold them to unsuspecting infertile couples. The result was genetic chaos. In some cases, fertility patients who were going through series after series of drugs and surgeries without success, discovered that their genetic child was born to another couple. Who, then, is the "real" parent? And should the court require the children returned to their genetic parents, even after living for months (or even years in some cases) with other parents?

In what frequently is viewed as the greatest act of lovecarrying a child for another couple unable to conceive children-the ethical dilemmas encountered are endless. What happens if prenatal testing determines the child has a genetic disorder? Who determines the fate of a child, should the surrogate mother experience deep venous thrombosis or pulmonary embolisms? What happens if a medical complication (such as pre-eclampsia) occurs during pregnancy? What recourse do infertile couples have with a surrogate mother who begins to mistreat the developing baby by using tobacco, alcohol, or drugs? What happens if the commiserating parents get divorced or die before the child is born? These complicated scenarios could fill a legal library (and likely will, as more and more of these situations become realities), but they rarely are discussed within the solemn walls of infertility clinics. What at first glance appears to be an act of pure selflessness is, in reality, a compromise of God's divine edict. And we only now are beginning to get a glimpse of the chaos this compromise creates.

HISTORY OF SURROGACY

In the past fifty years, options for couples with fertility problems have increased to the point that this escalating field has taken on almost a "science fiction" persona (Moe, 1998). While fertility treatments can correct some of the causes of infertility -either through surgery or medications (Weiger, Auxier, and Frye, 2000)-they also pose ethical dilemmas never imagined. To compound the problem, women today tend to wait longer to have children than they did in the past. The quality of a woman's eggs deteriorates as she ages-contributing to the condition of infertility. According to recent research, female fertility peaks by age 25, and falls throughout the remainder of a woman's reproductive life (Dutton, 1997). Historically, infertile couples living only one or two generations ago would remain childless. or they could adopt. Today, however, infertile couples can choose from a variety of assisted reproductive technology methods. Surrogacy is just one of those new options.

In recent years, there has been a revival of interest in the procedure of using a surrogate mother to help infertile couples have a child. In the 1980s, the surrogate mother usually provided her own eggs for artificial insemination, using the sperm from the prospective father (Dutton, 1997). Thus, there was a genetic link to the husband, but not to his wife. After the child was born, the wife would adopt the child, and the surrogate (and her husband, if she was married) relinquished parental rights to the child (Fischer and Gillman, 1991). This method commonly is viewed as traditional surrogacy.

By the 1990s, *in vitro* fertilization (IVF) made it possible for egg and semen to be obtained from the commissioning couple (or from anonymous donors), and the resultant embryo then could be implanted into the surrogate mother (Brinsden, 1999). There are also newer procedures such as GIFT (gamete intrafallopian transfer) or ZIFT (zygote intrafallopian transfer) in which the transfer is performed at an earlier stage

(Moe, 1998). In these cases, the surrogate only performs the function of gestation for the couple, without possessing a genetic link to the child. While a court order may be used to identify the legal parents, adoption usually is unnecessary in most states (Dutton, 1997). This method is called gestational surrogacy or host surrogacy, and is gaining in popularity, since it allows both parents the ability to contribute to the genetic make-up of the child. The surrogate mother typically receives a fee of \$10,000-\$20,000 (or more) for the delivery of the child (Schwartz, 2000), and once the baby is born, the surrogate relinquishes all parental responsibilities to the genetic parents. Couples desiring this new procedure normally can expect to pay about \$40,000 or more for legal, medical, psychological, and program service fees (Dutton, 1997)-but that price tag does not include the emotional price that frequently accompanies surrogacy procedures.

A BIBLICAL EXAMPLE OF SURROGACY, AND THE ANGUISH IT CAUSED

In trying to defend the practice of surrogacy, and in an effort to gather support, some individuals point to the Bible as if it granted them permission for this procedure. Using Abraham and Sarah as models for infertility, certain clinics and infertility Web sites point out that the history of surrogate parenting goes all the way back to the days of Abraham. In Genesis 16, we learn that Sarah was barren-having produced no children with Abraham. After the Lord made a covenant with Abraham, Sarah wanted to ensure that he had a child to continue his lineage. As such, she gave her hand-maid, Hagar, to her husband so that he might conceive a child with her. That relationship did result in a son, Ishmael, for Abraham, but the story does not end there. We learn in verse 4 that as soon as Hagar conceived this child, she was despised by Sarah. In fact, the text goes on to inform us that Sarah's emotional state caused her to "deal hardly" with Hagar, causing her to flee

from Sarah. What became of Ishmael? Was he the father of the Jewish race? No, that honor belonged to Isaac, the child whom Sarah eventually would carry. In Genesis 21, we learn that God told Abraham to take Ishmael and his mother and put them on the edge of the wilderness and send them away from his presence. Prior to their exodus, we read that this decision was very grievous in Abraham's sight because of his son (21:11). This man clearly did not want to cast out his own flesh and blood, yet this is exactly what happened in this biblical example of surrogacy.

While we do not find any biblical passages that state, "you shall not participate in surrogate parenthood," we know what the principle of surrogacy entails. Surrogacy circumvents many of God's law regarding the family unit and reproduction. In 1 Timothy 5:14, Paul wrote: "I will therefore that the younger women marry, bear children, guide the house." What is the divinely approved order here? One is to marry, then bear children. With surrogacy, you do not need marriage. In fact, a woman does not even need a husband. She simply could contract with the local sperm bank to be able to fertilize one of her eggs. This procedure, however, introduces at least one additional person into the covenant marriage relationship that God established. In traditional surrogacy, a husband's sperm is used to fertilize the egg of another women who is not his wife. Does the fact that a couple obtains the child they want, alter the fact that a man's sperm cells are placed into another woman's body and used to fertilize an egg that was not his wife's?

In cases of *in vitro* fertilization where a husband and wife's gametes are used, consider what happens to the "leftovers." Doctors routinely take 15-20 eggs from the female. Of those, approximately 10-12 will be fertilized. Normally, 3 to 5 are implanted in the surrogate in order to increase odds of impregnation. This leaves approximately ten of the fertilized embryos as "leftovers." What happens to them? Are those fertilized embryos merely blobs of tissue–or are they individ-

ual humans? We know that God views life as having begun before the child actually is born. The prophet Isaiah confirmed it this way: "Take heed, you peoples from afar; The Lord has called me from the womb; from the matrix [bowels] of my mother he has made mention of my name.... And now the Lord says, who formed me from the womb to be his servant" (Isaiah 49:1,5). Jehovah not only viewed Isaiah as a person prior to his birth, but also called him by name. Additionally, the Lord, speaking to the prophet Jeremiah, stated: "Before I formed you in the womb, I knew you; before you were born, I sanctified you..." (1:5). Genesis 4:1 records: "Adam knew Eve his wife; and she conceived, and bore Cain, and said, 'I have acquired a man from the Lord.' " Some forty times, the Scriptures make reference to women conceiving. Is it merely by accident that the inspired writers recorded that special moment when the sperm and egg come together? What, then, of those leftovers? Are they to be frozen for future use? Or should they simply be washed down the drain?

The desire to reproduce and rear children often overshadows God's divine plan. Infertile couples who are unable to bear children, assure friends and relatives that God does not want them to be unhappy. Thus, the quest for children begins. Have we forgotten that the Bible clearly speaks of infertile individuals? Does the fact that some people are unable to bear children change their relationship with God? Are they not still able to serve faithfully? Recall that King David married Michal (daughter of King Saul), and yet the Bible informs us that Michal never bore children (2 Samuel 6:23). Several women of the Bible are described as barren, but this did not keep them from obediently serving the Lord. Just after the Hebrew writer wrote that "marriage is honorable among all, and the bed undefiled: but fornicators and adulterers God will judge" (13:4), he admonished us to "be content with such things as you have, he Himself said, 'I will never leave you, nor forsake you." God has not forgotten or turned His back

on Christians who are unable to bear children. But they will be held responsible for their actions. We need to fully understand that surrogacy (and some other artificial reproductive techniques) violate(s) God's law regarding marriage and reproduction. One man, one woman, for life with one exception –that is God's divinely designed plan (Genesis 2:21-24; Matthew 19:4-9; Mark 10:6-12)

CURRENT LAW

Gestational surrogacy and surrogate agreements vary from state to state. In fact, many states have not settled on all of the issues, and thus some judges find themselves making rulings without any precedent. For instance, under Ohio law, "when a child is delivered by a gestational surrogate who has been impregnated through the process of *in vitro* fertilization, the natural parents of the child are identified by a determination as to which individuals have provided the genetic imprint or the genes for that child" (Dobbins, 1996). This ruling seems to be the direction in which most courts are leaning to determine parenthood. However, what happens in cases like the Buzzanca case in which none of the parties involved was a genetic parent?

Consider also what happens when the surrogate does not want to relinquish rights to the infertile couple. Mary Beth Whitehead, the surrogate mother of the now-famous "Baby M.," made history when she decided to keep the baby after she was born. The father, William Stern, had contracted with the mother, Mary Beth Whitehead, to bear him a child through artificial insemination (thus the embryo was created using Mary Beth's egg, and William Stern's sperm cells). The contract provided that Mrs. Whitehead would receive a fee of \$10,000 upon terminating her parental rights and giving up the child to him.

After the birth of the child, however, Mrs. Whitehead had a change of heart, and informed the Sterns that she had decided to keep the child. On March 31, 1987, Judge Harvey R. Sorkow of the New Jersey Superior Court awarded custody of "Baby M." to the child's biological father, and stripped her surrogate mother of all parental rights. In making this decision, Sorkow declared as legal the practice of surrogate motherhood and of surrogacy contracts. The Whiteheads appealed the decision, asking the court to determine "surrogacy contracts" unenforceable and void (Annas, 1988, p. 21). Since then, the New Jersey Supreme Court has reversed Sorkow's decision, declaring surrogacy contracts in violation of New Jersey adoption law, and thus invalid and unenforceable. One of the problems in enforcing surrogate contracts is that, in essence, the child is considered as property. Thus, the battle has begun in many states to determine whether surrogate contracts are truly enforceable. Is the child a human being with certain rights, or is "it" property that was "signed over" by a contract? Add to this mire the complexity of money-because it is against the law to sell babies in this country-and you can begin to understand why these laws are evolving as new cases are presented.

Gestational surrogacy presents, for the first time, an opportunity for more than one woman to accurately claim a physical parental relationship to the same child—one providing an egg, and one nurturing the child in her womb. In *Johnson v. Calvert*, the California Supreme Court faced such an issue when it decided the legal maternity of a baby born to a gestational surrogate (see *Johnson v. Calvert*, 1993). In this case, a husband and wife brought suit, seeking declaration that they were the legal parents of a child born to a surrogate mother. However, despite having donated the egg and having made a contractual agreement for the "intended parents" to have legal custody of the child, the surrogate attempted to file her own action to be declared the mother of the child. The court concluded that the "intended parents" were the child's legal parents, and that California law recognized only one natural mother, despite advances in reproductive technology that rendered a different outcome biologically possible.

The Supreme Court in Johnson v. Calvert relied, in pertinent part, on the Uniform Parentage Act (in West's Ann. Cal. Family Code Secs. 7600 et seq.), which "facially" applies to any parentage determination. Pursuant to the Uniform Parentage Act, the Court recognized that while both genetic consanguinity and giving birth are a means of establishing a mother/child relationship, a situation may arise where the two means do not coincide in one woman. In this instance, the Court asserted, the woman who intends to bring about the birth of the child whom she intends to rear as her own, is the "natural mother." But this one simple legal "Act" is hardly a cure-all for the plethora of ethical issues caused from surrogacy.

When does a woman become a mother—while she is pregnant, or after she has delivered a baby? What of the bodily experience of pregnancy? Does a woman's participation in pregnancy—the act of carrying the fetus in her uterus—have any bearing on who the "true" or "natural" mother is? And what happens when the "genetics" of the child comes from donors? Allowing surrogacy to continue, not only forces us to face these questions, but also to provide some type of answer. Clearly, we as a society have stepped outside of God's original plan for marriage and reproduction. Christians not only must avoid surrogacy, but also should define and discuss it in biblical terms: sin. God set forth a pattern, and any action contrary to that pattern is sin.

CONCLUSION

Statistics indicate that approximately fifteen percent of American couples are infertile (defined as being unable to bear children after one year of trying). Many of these find the adoption process protracted and arduous. As such, thousands are turning to artificial reproductive techniques in the hope that they may fulfill their desire to be parents. God set forth a divine plan for marriage and reproduction that was to take place only between husband and wife. Surrogacy supersedes God's law—and as such, faithful Christians should not accept it. Christians must understand that their number one priority in life is still to remain faithful and serve Almighty God. Infertility does not change this.

While new reproductive technological breakthroughs are reported every year, Christians must remain vigilant in seeking to please God, not themselves. The reproductive field has provided numerous new ways to bear children. However, just because the technology exists, does not make it acceptable. We must learn to question a judicial system that allows a natural mother to sign away a child she has not yet conceived in exchange for \$20,000. We must oppose a system in which donor egg and sperm can create a child who has **no genetic parent**, thus causing the courts to conclude there is **no legal parent**. Is our posterity nothing more than a commodity to be sold in exchange for services rendered? As Christians, we must remain determined to adhere to the unchanging message of God's Word.

[SPECIAL NOTE: For those who already have participated in *in vitro* fertilization or surrogacy and are now faced with what to do with "leftovers," there are embryo adoption agencies that will try and find loving homes for these children. While this does not legitimatize *in vitro* fertilization, it does provide a better resolution to those who find themselves in this situation and realize the importance of adhering to the sanctity of life. For more information, contact Snowflakes, an embryo adoption program conducted through Nightlight Christian Adoptions. Their Web address is http://www.snow flakes.org/.]

Chapter 4

Tough Decisions Regarding... In vitro Fertilization and Other Fertility Practices

The bomb was no respecter of persons. At 8:15 a.m. on August 6, 1945, a twenty-kiloton atomic bomb nicknamed "Little Boy" was dropped from the Enola Gay (a B-29 bomber) onto the town of Hiroshima. Described by many as the most horrific bomb ever used on humans, the bomb exploded with a blast stronger than any hurricane, giving off deadly rays of heat and blinding light. Those who did not perish from the initial blast were left to face a new and deadly danger-radiation. Invisible to the naked eye, waves of deadly radiation penetrated the bodies of all those in Hiroshima-from housewives simply carting groceries home, to shop owners and governmental officials. As a result, it has been estimated that the initial blast from that bomb killed 80,000 people, with an additional 20,000-50,000 perishing in the first few weeks that followed. By any account, the loss of human life in that southern Japanese community was ghastly.

For a moment, then, consider multiplying the deaths that occurred at Hiroshima by a factor of three or four. How unspeakable would it be to sit by idly during "non-war" times and watch four bombs detonate over four cities, each resulting in 100,000 fatalities? The numbers would be staggering, and would incite rage in the hearts of many. And yet, that number is exactly how many frozen embryos were counted during a nationwide survey of American fertility clinics. *Washington Post* reporter Rick Weiss subtitled his report: "The first count found far more than many had thought. Conservatives and scientists are upset" (2003). Upset indeed! While these 400,000 precious souls may not enjoy the freedoms of walking, talking, and working in our society, that does little to change the fact that they are very much human embryos.

David Hoffman and colleagues, in association with the Society for Assisted Reproductive Technology, carried out the national count. They reported that their objective was "to determine the number of embryos stored at assisted reproductive technology (ART) clinics in the United States and their current disposition" (Hoffman, et al., 2003, 79:1063). The researchers surveyed all medical practices providing *in vitro* fertilization practices in the United States. They noted:

The SART-RAND [SART–Society for Assisted Reproductive Technology; and RAND–a contraction of the term research and development–BH/BT] team surveyed all 430 ART practices in the United States. Of these practices, 340 returned surveys for analysis. The data from these surveys were merged with data taken from the 1999 SART dataset, which contains information about practice size and success rates. Responding clinics reported a total of 396,526 embryos in storage as of April 11, 2002. The vast majority were targeted for patient use. Small numbers of embryos were available for research, donation, destruction, quality assurance, or other uses (p. 1063).

Yes, indeed the fertility industry is booming. And sadly, only now are we slowing down enough to realize the catastrophic consequences. Those embryos that are "targeted for patient use" are being held for possible use by couples who already have undergone a fertility cycle–and many (considered as unneeded) will never be used. Couples–not wanting to make the wrong decision–choose not to make **any** decision. So they continue paying \$1,500 per year until they can figure out exactly what to do with their nascent human life. Thus, fertility clinics currently are bulging with 400,000 frozen embryos, running out of storage room, all-the-while praying they do not experience an accidental meltdown.

In their 1998 National Summary, the Centers for Disease Control reported that 61,650 cycles of artificial reproductive fertilization occurred in the United States (see CDC–National Summary, 1998). Today, that number is estimated to be 100,000. On average, five-to-twelve eggs are fertilized in order to facilitate embryonic transfer, although it is not uncommon for some individuals to have at their disposal twenty or more embryos after artificial reproductive procedures. The CDC reports that in 1998, on average, physicians implanted only 3.7 embryos into women hoping to become pregnant. This would result in a minimum of 2-8 embryos being unused, and therefore plunged into the freezing depths of liquid-nitrogen canisters.

When Rick Weiss wrote that both conservatives and scientists are upset, he was right—but not for the same reason. Conservatives realize that most of those human lives will one day be thawed and "conveniently" discarded. Researchers, on the other hand, want the chance to utilize those 400,000 lives in stem-cell experiments. Under the banner of "potential lifesaving benefits," these scientists are urging that clinics be allowed to make "unwanted" embryos available for research. However, they realize that President George W. Bush's August 9,2001 ruling on stem-cell research prohibits federally funded laboratories from using human embryos.

Previous estimates ranged anywhere from tens of thousands up to 200,000. We now know that, of the 430 clinics surveyed, 340 admitted to housing almost 400,000 human embryos. The only thing that seems to be slowing down these clinics is lack of storage space. Of course, that problem will be overcome as cryogenic centers continue to raise their storage fees, causing more and more couples to choose the "thaw and discard" solution. With assisted reproductive technologies racing to increase their success rates, we likely will hit the one million mark in the very near future—all of this because we sat by idly and allowed researchers to go on advocating that embryos are not "real" humans.

ARTIFICIAL REPRODUCTIVE TECHNOLOGIES

On November 5, 1990, *Time* magazine published an article titled "A Revolution in Making Babies." The author, Philip Elmer-Dewitt, observed that in the past

...there was only one way to make a baby, at least for humans. Either it worked or it didn't, and if it didn't, there was little anyone could do about it. All that has changed dramatically. The growing problem of infertility–exacerbated by a generation of would-be parents who put off having babies until their 30s and 40s–and the early successes of *in vitro* ("test tube") fertilization have laid the groundwork for a revolution in reproductive technology. Hardly a week goes by without news of a breakthrough to help nature take its course (1990, p. 76).

In his article, Mr. Elmer-Dewitt addressed some of these breakthroughs which, he said, "...seem to multiply faster than testtube babies. Most are variations on the pioneering procedure known as *in vitro* fertilization" (p. 76). What is *in vitro* fertilization [IVF]? How does it work? And what should be a Christian's response to it?

The method known as artificial insemination (AI) is not used as often as some other methods of artificial reproduction, due in part to the fact that AI generally is useful only when dealing with male reproductive problems. Women, however, often have more fertility problems than men, due to the fact that their reproductive system is so much more complex than the male's. When a woman is having reproductive problems, AI is not likely to help the situation (although there may be exceptions).

The process of fertilization and subsequent implantation of the human egg is so complicated that it is amazing that there are not more problems than there are. With *in vitro* (from the Latin meaning "in glass") fertilization, the problems that do arise are becoming increasingly manageable. Normally, ovaries are stingy with their eggs, releasing only one egg approximately every twenty-eight days. But an injection of the proper hormones can cause "superovulation" (sometimes referred to as "hyperovulation")-the release of multiple eggs. To collect the eggs for use in IVF procedures, approximately thirtytwo hours after the hormone injection, an incision is made in the female's abdomen, and the ovaries are examined with a laparoscope (a telescope-like device with internal lighting capabilities). When a "blister" is noticed to have occurred on the ovary, a suction needle is inserted to remove the eggs stored in the blister. The eggs are placed in a special growth medium for several hours, and then into a suspension of sperm cells. Within a few hours, if all goes well, fertilization will have occurred.

All of this may sound simple, but it is not. Sperm, for example, must undergo a process called "capacitation" before they can fertilize an egg. Normally, this process occurs in the uterus, but in IVF, it must be accomplished artificially. Once fertilized, the egg develops for several days outside the body. Implantation of the embryo is critical, since timing is so important. The embryo must be at a certain stage (usually 2-21/2 days old), and the uterus must be ready. At the appropriate time, the fertilized egg is inserted into the uterus through a long, soft, plastic tube.

In vitro fertilizations have been accomplished in rats, dogs, cats, mice, and even man. As far back as the 1940s, scientists have experimented with the fertilization of human eggs out-

side the womb. In those days, the embryos lived only a short time. In 1959, Daniele Petrucci, a research biologist with the University of Bologna in Italy, announced he had fertilized a human egg that grew outside the body for fifty-nine days. He claimed that "a heartbeat was discernible," but he destroyed it because "it became deformed and enlarged-a monstrosity" (see Grossman, 1971, p. 43; Lygre, 1979, p. 24). In 1966, Russian scientists announced to an unsuspecting world that they had succeeded in keeping more than 250 human embryos alive in a laboratory setting for periods of up to six months (Lygre, 1979, p. 24). In July 1974, Douglas Bevis of the University of Leeds in England announced that he had succeeded in producing three infants through IVF. However, he never produced the children or families to prove his claim, and therefore the scientific community remained skeptical (see Howard and Rifkin, 1977, p. 109). Then, on July 25, 1978, John and Lesley Brown of Great Britain gave birth to their daughter, Louise-the result of *in vitro* fertilization performed by Patrick Steptoe, a gynecologist in Oldham, England, and Robert Edwards, a physiologist from Cambridge University (Gwynne, 1978).

Suddenly, IVF in humans no longer was the stuff of science fiction. To date, thousands of children have been produced through this procedure, representing a lot of "progress" in a relatively short time (see Elmer-Dewitt, 1990, p. 76). The Bourn Hall Clinic in Cambridgeshire, England, founded by Drs. Steptoe and Edwards, produced 1,295 children in its first ten years—"almost a tenth of the world's test-tube babies" (*People*, 1989, p. 77). Of those, 615 were in attendance for the clinic's tenth anniversary celebration, including the historic Louise Brown.

Clinics specializing in IVF procedures are springing up all around the world. According to data released in 1988 by the American Fertility Society, at that time the United States had over 175 such clinics (Scott, 1988, p. 17). One of the best-known of those clinics is operated by Drs. Howard and Georgeanna Jones in Norfolk, Virginia. Billed as the "nation's premier testtube baby program," the Jones' clinic specializes in *in vitro* fertilization (Gold, 1985). Of interest, however, are statistics indicating that nearly half of the estimated 175 IVF centers in America never have produced a single baby (Scott, 1988, p. 17). Because there have been few regulatory laws on the books dealing with these rapidly increasing reproductive technologies (thus, little government involvement), accurate data on the actual successes (or failures) of clinics specializing in IVF are hard to come by. However, data released in 1988 indicated that the chance of becoming pregnant after a successful in vitro procedure was 17%, but because of the high risk of miscarriage or stillbirth, the chance of actually having a baby dropped to only 11% (Scott, p. 17). Five years later, the success rate remained about the same. In the United States it was 14%, and in Great Britain 121/2% (Winston and Handyside, 1993, 260:932). As Elmer-Dewitt noted, "But even at well-run clinics, the original IVF fails 75% to 85% of the time" (1990, p. 76).

The costs of these procedures are considerable. The price for a single attempt, regardless of its success or failure, varies from \$7,000 to \$15,000, depending on the clinic, complications involved in the procedure, and other factors. In his book, *Biotechnology and the Assault on Personhood*, Donald DeMarco documented the cost factors associated with IVF attempts, including some potential parents who have spent over \$40,000. He also noted that there are additional "costs" not always considered, and that they are not always financial in nature (1991, pp. 119-132). As a result, efforts are under way to improve the success rates of *in vitro* fertilizations using a variety of methods such as cryopreservation (freezing of the embryos prior to use) and a number of others (see Elmer-Dewitt, 1990, p. 76; Winston and Handyside, 1993).

When topics such as those being discussed here (i.e., reproduction and the right to bear a child) are under consideration, emotions not only are involved, but often run high. Therein lies part of the problem. Two specific examples may be cited. Pat Anthony was a 48-year-old grandmother from Transvaal, South Africa. Her married daughter, Karen, 25, was unable to have any more children due to the fact that she almost bled to death during her first delivery, and had to have her uterus removed. Through IVF procedures, eggs from Karen's still-functioning ovaries were fertilized by her husband Alcino's sperm. But the historic part of the story is that the fertilized eggs were implanted in Karen's **mother**, Pat. In other words, Pat would be the first woman ever to give birth to her own grandchild! On October 14, 1987, Pat did just that, except it wasn't a grand child but grand children-three to be exact. David (5 lbs., 8 ozs.), Jose (4 lbs., 15 ozs.), and Paula (3 lbs., 9 ozs.) were born by caesarean section, and made not only the evening news, but history (Levin, 1987, p. 40). Now Karen and Alcino Ferreira-Jorge had the children they so desperately desired. The cover of the October 19, 1987 issue of People magazine heralded the event with the bright yellow headline, "A Mother's Love," referring to the love that Pat had for her daughter-a love so deep that she was willing to bear the children her daughter Karen could not (Levin, 1987).

Almost four years later, *People* would scoop another exclusive-the first grandmother in America to do what Pat Anthony had done in South Africa. Arlett Schweitzer, 42, of Aberdeen, South Dakota, agreed to have herself impregnated via IVF procedures with eggs from her daughter Christa that had been fertilized by Christa's husband, Kevin. Two of the four eggs were implanted successfully in Arlett's uterus, producing twins for Christa and Kevin Uchytil.

Real tearjerkers, these dramas. They make great copy (not to mention blaring headlines). And the first thing that most people think when they read such emotion-packed stories is, "How wonderful that these people finally have the children they wanted for so long!" As Christa Uchytil said, "My animals, my home, my husband, that's my life. Now I'll have babies too. It will be perfect" (as quoted in Plummer and Nelson, 1991, p. 40).

But is it really "perfect"? Generally speaking, technologies are neither good nor bad in and of themselves. Rather, it is the **use** of them that determines their moral implications. There are some scientists and ethicists, however, who argue that certain reproductive technologies are **intrinsically** evil—for the simple reason that they cannot be carried out without violating certain ethical principles.

Basic medical ethics requires that in any experiment the subject must know the risks involved and give "informed consent." In the case of IVF, however, the tiny embryos created (and often subsequently destroyed) in a laboratory do not know the risks involved and cannot give informed consent. Many people are unaware that while **multiple** eggs are extracted and fertilized, only a few are selected for implantation. Doctors actually pursue what might be called a "survival-of-the-fittest" procedure wherein they examine the fertilized eggs, purposely and carefully select those that appear the healthiest, and then implant several of them into the woman's uterus. Once that has been accomplished and the gestation process is under way in the womb, a new technology known as transabdominal selective reduction allows doctors to further examine the zygotes and surgically destroy those that are deemed "inferior" (see Calhoun, 1990). Thus, two of Darwinian evolution's most important concepts-selection and survival of the fittest-are brought to bear in this unique reproductive procedure. But what happens to the other fertilized eggs that are "unfit" to survive, and thus remain unused in this particular process? They quite literally are washed down the drain of the nearest sink!

Basic medical ethics also requires that the experiment be to the subject's benefit. It hardly is to the embryos' benefit to be washed down the drain and drowned in the early hours of life! Nor is it to the embryos' benefit to be implanted into a womb, only to see their potential life snuffed out through "transabdominal selective reduction" or a miscarriage (estimates are that 60% or more of artificially implanted embryos miscarry; Winston and Handyside, 1993, 260:932).

Are these tiny embryos human? If one of them was traveling down a woman's Fallopian tube or implanted in her uterus instead of floating in a Petri dish, it would be considered unquestionably human. Yet somehow because it now is capable of being manipulated outside the womb, its "humanness" ceases? How so? Ethicist Allen Verhey has commented:

Even if one did not hold that the human being's history begins with conception, respect for human life is nevertheless violated here...because here human life is created in order to be destroyed. Here the procedure demands from the very beginning the intention to kill those intentionally fertilized but not chosen (1978, p. 16).

Further, the question needs to be asked: What are the potential applications and implications of IVF? While some may be acceptable, others are not. Consider the following.

- 1. Previously infertile women might become fertile via IVF.
- 2. Women who wanted children, but whose health would not permit routine pregnancy, could donate their eggs but have them placed, after fertilization, into a surrogate mother who was healthy.
- 3. Older women who wanted to avoid such risks as Down's syndrome could accept a fertilized egg from another woman donor, then carry it to term on their own.
- 4. Women who are recognized as potential carriers of certain genetic disorders could have fertilized donor eggs implanted in their wombs, thus avoiding the possibility of the genetic disease being expressed in the child.
- 5. Women could "rent" their wombs, as they become surrogate mothers.

Is the Christian opposed to married couples having children? Certainly not. Is the Christian opposed to using legitimate means to help childless couples have the children they so desperately want? Certainly not. Christians, however, **are** opposed to the wholesale production and subsequent slaughter of innocent human embryos in the search for the "fittest" that is deemed good enough to be given a chance at survival.

The question sometimes is asked as to whether one day it will be possible to develop IVF procedures that allow removal of only one or two eggs from a woman's ovary, with the subsequent fertilization and implantation of all those eggs so they (potentially) can grow to term. This, it is argued, would avoid destruction of the remaining embryos, and thus would be a method not necessarily deemed unethical, immoral, or unscriptural. Research in this area is continuing. The outlook, however, is bleak because "the quality of both the embryo and the uterine environment affects success. Individual human embryos only have a poor chance of development to fetal stages" (Winston and Handyside, 1993, 260:932). At costs ranging from \$7,000 to \$15,000 for a single attempt, every effort will be made to ensure success. The obvious way to increase the chance for success is to fertilize and implant many eggs, not just one or two. But therein lies part of the problem. While multiple eggs may be implanted, numerous eggs still remain unused (and subsequently are destroyed).

[NOTE: If it were theoretically possible to find a physician willing to fertilize a single egg, and implant the resulting embryo, then one would not have to worry with the consideration of killing "leftover" embryos. However, Christians should be warned that finding such a physician is almost impossible. The fertility practice is always judged on success, and more embryos improve the chance of success. Not many fertility specialists are willing to concede their success rates in an effort to just implant a single embryo.] In recent years, additional IVF procedures have been developed. In one procedure known as Gamete Intra-Fallopian Transfer (GIFT), the eggs and sperm together are placed into the woman's fallopian tube(s) in the hope that conception will occur. The GIFT procedure requires that a woman have at least one normal fallopian tube, and, unlike a true IVF procedure, allows fertilization to occur inside the body, rather than in an incubator outside the body. Except for women with two damaged fallopian tubes, women who are candidates for IVF also are candidates for GIFT, which generally has a somewhat higher success rate (25-35% in some cases).

However, the GIFT procedure does have certain disadvantages when compared with routine IVF procedures. For example, at present most GIFT procedures require laparoscopy in order to transfer the eggs and sperm into the fallopian tubes, which makes them more complicated than an IVF embryo transfer through the vagina and cervix into the uterus. Newer developments allow for placement of the gametes into the fallopian tube(s) using a tiny catheter threaded through the cervix and uterus, but this technique is more difficult to perform successfully than the procedure that allows direct visualization via a laparoscope. And, if GIFT fails, there is no way of knowing whether the eggs were fertilized—something that is readily apparent in regular IVF transfers.

Another procedure, known as Zygote Intra-Fallopian Transfer (ZIFT), actually is a combination of IVF and GIFT. The sperm and egg are mixed in a culture dish outside the womb, but one day later the developing zygote is placed into the fallopian tube prior to becoming a full-fledged embryo. This procedure is considered especially useful in cases where the husband is subfertile, since sperm may be collected over a period of time, frozen until needed, then thawed and used in a ZIFT procedure. It does suffer, however, from the same drawbacks as GIFT procedures.

CONCLUSION

Contrary to the unproven and unscientific assertions of evolutionists, man did not evolve from lifeless, primordial matter. Rather, as the Bible clearly teaches, "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living being" (Genesis 2:7). It is God who "giveth life, and breath, and all things" (Acts 17:25). Human life, as a gift from God, is sacred. Yet there is a growing tendency to ignore this divine principle, and to view human life as that which may be destroyed capriciously. Should Christians make this an issue of ethical concern? Or shall we, to use Leon Kass' words, "leave it so that discarding laboratory-grown embryos is a matter solely between a doctor and his plumber" (as quoted in Restak, 1975, p. 65)?

Man is the offspring of God (Acts 17:28-29). Intellectually and morally, humankind was created in the image of the Godhead (Genesis 1:26-27; cf. Ephesians 4:24 and Colossians 3: 10). Mankind, as designed by God, was thus "fearfully and wonderfully made" (Psalm 139:14). As he originally came forth from the Creator as one of the "wondrous works of him who is perfect in knowledge" (Job 37:16), he was, together with the rest of creation, "very good" (Genesis 1:31). Some today speak with great fervor about the "technological imperative" We mentioned earlier–whatever **can** be done **will** be done! Against this kind of unscriptural thinking the faithful Christian must press the ethics of the Bible. Regardless of what we are being told by some, the end does not always justify the means. Ethics is not situational, but rather is bound by the absolute standard presented in the Word of God.

No one should be made to feel ashamed because of an inability to produce children. There are times when problems occur that are no one's "fault." Blame cannot (and should not) be assumed or assigned, for that only adds additional feelings of unnecessary guilt. Some physical problems cannot be overcome by ethically acceptable methods. Christians should realize that IVF procedures are expensive, have fairly low success rates, and generally produce a situation where fertilized human embryos are created in greater numbers than can be used. Thus, those that are not "fit to survive" are destroyed—a clear violation of the principles in Scripture regarding life as a gift from God.

Furthermore, while biblical teaching on the ethics of such matters is being studied, its instruction on stewardship should be examined as well. Even if a means is available to circumvent the physical inability of a couple to produce children, it may be unwise to employ it. Incurring huge amounts of debt, depleting family funds needed to pay routine bills, and other such practices may not fall within the purview of biblical stewardship. All of these factors, and more, should be considered by those contemplating use of these new technologies.

Chapter 5

Tough Decisions Regarding... Abortion and RU-486

The call was just like many others that we receive at our offices in Montgomery. On the other end of the line was a Christian mother who had sent her son away to college. Now, just a few short months later, she realized that he was questioning his faith and abandoning the Bible in favor of science. He had shared with her some of the material he was learning in his biology class, and it was obvious that the information was completely at odds with biblical teaching. During the conversation, the mother related some of the material that her son said "proved" that humans had evolved—claims like human embryos having gill slits and evolutionary tails while they are growing in the womb. "Ontogeny recapitulates phylogeny" is the mantra sometimes heard in freshman biology classes—a concept which, simply put, theorizes that human embryos replay the steps of evolution as they develop.

The November 11, 2002 cover story of *Time* magazine detailed the latest findings in human fetal development. Juxtaposed between the high-resolution images and the article were photo-captions that contained throwbacks to this outdated and erroneous embryonic recapitulation theory: "32 days: ...The brain is a labyrinth of cell-lined cavities, while the emerging arms and legs still resemble flipper-like paddles. 40 days: At this point, a human embryo looks no different from that of a pig, chick or elephant. All have a tail, a yolk sac and rudimentary gills" (Nash, 2002, 160[20]:71). The article itself presented a "marvelous," seemingly "miraculous," and "vastly complicated" embryonic process. However, those glossy pictures the ones people tend to remember—were accompanied by captions that painted an entirely different picture.

Is it true that, during its development, the human embryo goes through various stages that resemble evolutionary ancestors? No, it is not. As Jonathan Sarfati noted: "A human embryo never looks reptilian or pig-like. A human embryo is always a human embryo, from the moment of conception; it is never anything else. It does not **become** human sometime after eight weeks" (2002, p. 202, emp. in orig.). The scientific community has known for decades that Ernst Haeckel-the man responsible for conjuring up this theory and then falsifying drawings to support his pet project-purposely misled the public during the late 1800s. Embryologist Erich Blechschmidt considered Haeckel's "Biogenetic Law" (as it came to be known) one of the most serious errors in the history of biology. In his book, The Beginnings of Human Life, he minced no words in repudiating Haeckel's fraudulent forgeries: "The so-called basic law of biogenetics is wrong. No buts or ifs can mitigate this fact. It is not even a tiny bit correct or correct in a different form. It is totally wrong" (1977, p. 32). In describing the general feeling upon discovering the truth, Sir Arthur Keith stated:

It was expected that the embryo would recapitulate the features of its ancestors from the lowest to the highest forms in the animal kingdom. Now that the appearance of the embryo at all stages is known, the general feeling is one of disappointment; the human embryo at no stage is anthropoid in appearance. The embryo of the mammal never resembles the worm, the fish, or the reptile. Embryology provides no support whatsoever for the evolutionary hypothesis (1932, p. 94).

And that was in the 1930s! The only thing that has changed in the last seventy years is the accumulation of even more evidence to indicate that humans never experience any reptilian or amphibian stages.

So why do modern-day professors and Time magazine still perpetuate this false theory-which was debunked over a century ago? Many individuals use this principle of "embryonic recapitulation" to justify that embryos are not human. After all, they say, at various stages the fetus is no different from a "fish or reptile." As an example, consider the case of the late evolutionist Carl Sagan, and his wife, Ann Druyan. In an article ("The Question of Abortion: A Search for the Answers") that they co-authored for the April 22, 1990 issue of Parade magazine, these two humanists argued for the ethical permissibility of human abortion on the grounds that the fetus-growing within a woman's body for several months following conceptionis not a human being. Thus, the killing of this tiny creature is not murder. What was the basis for this assertion? Sagan and Druyan argued their case by subtly employing the antiquated concept of embryonic recapitulation. They wrote that the embryo first is "a kind of parasite" that grows to resemble a "segmented worm." Further alterations, they suggested, reveal "gill arches" like that of a "fish or amphibian." Supposedly, "reptilian" features emerge, and later give rise to "mammalian... pig-like" traits. By the end of the second month, according to these two authors, the creature resembles a "primate, but is still not quite human" (1990, p. 6).

In his book, *Man's Search for Meaning*, internationally renowned psychiatrist Viktor E. Frankl wrote about his years of witnessing unspeakable horrors in Nazi death camps. In discussing the value of human life, he wrote:

Under the influence of a world which no longer recognized the value of human life and human dignity, which had robbed man of his will and had made him an object to be exterminated (having planned, however, to make full use of him first—to the last ounce of his physical resources)—under this influence the personal ego finally suffered a loss of values. If the man in the concentration camp did not struggle against this in a last effort to save his self-respect, he lost the feeling of being an individual, a being with a mind, with inner freedom and personal value. He thought of himself then as only a part of an enormous mass of people; his existence descended to the level of animal life (1984, p. 70, parenthetical item in orig.).

Animal life—isn't this what many scientists tell us humans descended from?

Are humans nothing more than "higher animals," as some would have us believe? Sadly, the questions revolving around the value of human life are found at both ends of the spectrum. On one end, there are those individuals who consider embryos tucked away safely in the wombs of mothers to be little more than "tissue." Interestingly, this "tissue" has well-developed internal organs, possesses active brain waves, responds to light and sound, and occasionally sucks its thumb. On the other end of the spectrum are aged individuals who argue that they already have lived a full life, and therefore their death should be facilitated and hastened by the medical community via euthanasia (literally, "good death"). Lying in between these two extremes are those heart-rending cases in which families must decide whether or not to remove life support from a comatose individual who is lying in a bed and connected to a respirator. And then there are the cases where terminal illnesses have invaded the lives of those far too young to battle these wretched afflictions. Although rarely discussed aloud-and certainly never admitted publicly-there are also those cases in which the medical establishment "trades off" a human life in a complex costbenefit ratio, after comparing the high cost of medical treatment. But what is the **real** cost?

What **is** the value of human life? As Christians, what are our obligations, and what should be our attitude, in such matters? In order to better investigate these moral dilemmas, we first need to define "life" and "death." According to *Stedman's Concise Medical Dictionary*, life is: "vitality, the essential condition of being alive; the state of existence characterized by active metabolism. The existence of organisms" (see McDonough, 1994, p. 567). Death is defined as:

cessation of life. In multicellular organisms, a gradual process at the cellular level, with tissues varying in their ability to withstand deprivation of oxygen; in higher organisms, a cessation of integrated tissue and organ functions; in man, manifested by the loss of heart beat, by the absence of spontaneous breathing, and by cerebral death (p. 253).

On occasion, physicians will specify that someone has reached a state of brain death or cerebral death. This is defined as: "in the presence of cardiac activity, the permanent loss of cerebral function, manifested clinically by absence of purposive responsiveness to external stimuli, absence of cephalic reflexes, apnea, and an isoelectric electroencephalogram [EEG] for at least 30 minutes in the absence of hypothermia and poisoning by central nervous system depressants" (p. 253). But not everyone agrees with such definitions. When does life truly begin, and when is someone truly considered dead? Our society is finding ways to "bend" these definitions in order to accommodate specific situations as they arise.

As our knowledge of science has increased, so have the ways in which we define human life. Consider the following views on when human life actually begins.

- 1. **The metabolic view.** As soon as metabolic processes start, then the organism is considered living.
- 2. **The genetic view.** A new individual is created at fertilization when the genes from the two parents combine to form an individual with unique properties.
- 3. **The embryological view.** In humans, identical twinning can occur as late as the twelfth day after conception. Such twinning produces two look-alike individuals with different personalities. Even con-

joined ("Siamese") twins can have different personalities. Thus, individuality sometimes is not fixed earlier than day 12. (In religious terms, the two individuals have different souls.) Some medical texts consider the stages prior to this time as a "pre-embryonic." This view has been expressed by scientists such as Renfree (1982) and Grobstein (1988), and has been endorsed theologically by Ford (1988), Shannon and Wolter (1990), and McCormick (1991), among others. (Such a view would allow contraception, "morning after pills," and contragestational agents after two weeks, but not abortion.)

- 4. **The neurological view.** The medical community generally has defined death as the loss of the cerebral electroencephalogram (EEG) pattern. Conversely, some scientists have suggested that the acquisition of the human EEG (at about 40 days) should be defined as the point when human life has begins.
- 5. The ecological/technological view. This view sees human life as beginning when it can exist separately from its maternal biological environment. The natural limit of viability occurs when the lungs mature, but technological advances can now enable a premature infant to survive after about 25 weeks of gestation. (This is the view currently operating in some states. Once a fetus is potentially independent, it cannot be aborted except in those instances where it is ruled by a physician to pose a threat to the mother's [physical or mental] health.)
- 6. **The immunological view.** This view sees human life as beginning when the organism recognizes the distinction between self and non-self. In humans, this occurs around the time of birth.

7. **The integrated physiological view.** This sees human life as beginning when it has become independent of the mother and has its own functioning circulatory, alimentary system, and respiratory systems. This is the traditional birthday when the baby is born into the world and the umbilical cord is cut.

In writing his lengthy opinion for the court in the infamous Roe vs. Wade case, Justice Harry Blackmun stated: "We need not resolve the question of when life begins." With those few words, the lives of millions of tiny babies were cut short, sending their souls heavenward. The Centers for Disease Control in Atlanta, Georgia, reported that over 1,200,000 abortions were performed in the United States in 1995 (see CDC-Abortion statistics, 2001; remember that these are only the instances that were reported). In fact, the United States has averaged well over a million abortions per year since 1977. The CDC estimates that 55 percent of legal abortions occur within the first eight weeks of gestation, and that 88 percent are performed within the first twelve weeks. According to many, this short span of time makes a big difference. Prior to the twelfth gestational week, many individuals view the embryo as "nonliving"; thus, life is not "terminated" in an early abortion. However, the facts indicate a totally different picture, as James Drummey pointed out several years ago:

One of the key elements in the abortion debate is the true nature of the victim. If the unborn child is a human being, then he or she deserves the full and equal protection of the law. Though it may still surprise some, there are few things more certain in January 1986 than that the unborn are human beings. It is a biological and scientific fact that human life begins at fertilization, when the sperm cell of the father penetrates the egg cell of the mother. That unique genetic package, something that each of us once was, contains everything that a person will become—the color of her eyes, the size of his feet, even whether he or she will contract diabetes at age fifty.

Thanks to the wonders of modern technology, we are able to study the unborn child from the earliest moments of its existence. We know that its heart begins to beat eighteen days after fertilization, that brain waves can be recorded by the fortieth day, and that all body systems are present at eight weeks and working by the eleventh week. Technological advances are such that more and more babies are surviving births after only 20 to 24 weeks of the normal forty-week pregnancy. And yet, the Minnesota Supreme Court ruled last month that an $8\frac{1}{2}$ month-old unborn child was not a human being under Minnesota law (1986, p. 22).

As Christians, we cannot afford to be so tranquil in resolving this question of when life begins. Our actions, or lack thereof, will stand in judgment one day. The inspired Word of God is crystal clear on such matters. Beginning as early as Genesis 4:1, we read: "And Adam knew Eve his wife; and she conceived, and bare Cain, and said, 'I have gotten a man from the Lord." Some forty times, the Scriptures make reference to women conceiving. It is no accident that the inspired writers mention this extraordinary moment in which the sperm and egg come together-for it is only at that instant that their chromosomes join to form the full complement of chromosomes that is capable of producing human life. James wrote: "The body without the spirit (pneuma) is dead" (2:26). But the opposite of that statement also must be true; if the body is living, then the spirit must be present. Thus, upon conception when that full complement of chromosomes is actively metabolizing and living–God already has placed a soul within the living embryo. Additionally, the prophet Jeremiah stated that the word of the Lord came unto him saying: "Before I formed you in the womb I knew you; before you were born I sanctified you" (1:5). Isaiah confirmed it this way: "Listen, O coastlands, to me, and take heed, you peoples from afar! The Lord has called Me from the womb; from the matrix [bowels]

of my mother He has made mention of my name.... And now the Lord says, Who formed Me from te womb to be His servant..." (49:1,5). Jehovah not only viewed Isaiah as a person prior to his birth, but also called him by name. It is obvious from the text that God view life as beginning at conception, not at birth.

In addressing a Senate Judiciary Subcommittee on April 23-24, 1981, Richard V. Jaynes stated: "To say that the beginning of human life cannot be determined scientifically is utterly ridiculous." Those hearings were carried out to determine the question of when human life begins? Accompanying Dr. Jaynes that day were numerous internationally known geneticists and biologists who conclusively reiterated that life begins at conception—and they told their story with a profound absence of opposing testimony.

Dr. Micheline Mathews-Roth of Harvard Medical School gave confirming testimony, supported by references from over twenty embryology (and other medical) textbooks that human life begins at conception. The man known as the "father of modern genetics," Dr. Jerome Lejeune, told the lawmakers: "To accept the fact that after fertilization has taken place, a new human has come into being, is no longer a matter of taste or opinion...it is plain experimental evidence." Dr. Hymie Gordon, chairman of the department of genetics at the Mayo Clinic, added: "By all the criteria of modern molecular biology, life is present from the moment of conception." Dr. McCarthy de Mere of the University of Tennessee, who is both a medical doctor and law professor, testified: "The exact moment of the beginning of personhood and of the human body is at the moment of conception." Dr. Alfred Bongiovanni of the University of Pennsylvania School of Medicine concluded: "I am no more prepared to say that these early stages represent an incomplete human being than I would be to say that the child prior to the dramatic effects of puberty...is not a human being."

One of those giving testimony during that hearing was Landrum Shettles, often called the "father of *in vitro* fertilization." Dr. Shettles noted: "Conception confers life and makes that life one of a kind." And regarding the Supreme Court ruling in *Roe v. Wade*, he stated: "To deny a truth [about when life begins–BH/BT] should not be made a basis for legalizing abortion." These are intriguing words from a man who helped fill *in vitro* fertilization clinics with embryos–embryos that already have been fertilized and thus, in all aspects are human.

In speaking about the Supreme Court justices' decision, professor Eugene Diamond stated: "...either the justices were fed a backwoods biology or they were pretending ignorance about a scientific certainty." In Roe v. Wade [410 U.S. 113 (1973)], the United States Supreme Court held that the U.S. Constitution protects a woman's decision to terminate her pregnancy. Only after the fetus is viable and capable of sustained survival outside the mother's body (with or without artificial aid) may individual states ban abortion altogether. Abortions necessary to preserve the woman's life or health still are being allowed, however, even after fetal viability. [Viability is defined as being able to survive (given the benefit of available medical therapy) to the point of independently maintaining heartbeat and respiration.] If a fetus is viable after delivery, it then is called a premature infant. In the past, physicians have tried to define viability in relation to gestational age. According to evolutionist Elie A. Schneour:

During development, the fertilized egg progresses over 38 weeks through what is, in fact, a rapid passage through evolutionary history: From a single primordial cell, the conceptus progresses through being something of a protozoan, a fish, a reptile, a bird, a primate and ultimately a human being. There is a difference of opinion among scientists about the time during pregnancy when a human being can be said to emerge. But there is a general agreement that this does not happen until after the end of the first trimester (1989, p. V-5).

Today, biology classes all over the United States are filled with students with sponge-like minds who are soaking up the notion that up until a certain point in the pregnancy, the embryo is nothing more than an evolving blob of tissue. Insurance companies and physicians have tried to make a black-andwhite determination of when an embryo actually is living (and thus viable). For many years, the line was drawn at 28 weeks. However, in 2000, a baby at 24 weeks gestation (and weighing only 14.3 ounces) was born in Laguna Hills, California. On June 10, the child, weighing just 3.5 pounds, was released from the hospital. Just a few years ago, this baby, according to most viability scales, would have been considered "non-viable" and therefore "not alive." In Planned Parenthood of Central Missouri v. Danforth [428 U.S. 52 (1976)], the U.S. Supreme Court recognized that judgments of viability are inexact and may vary with each pregnancy. As a result, the court granted the attending physician the right to ascertain viability on an individual basis. In addition, the Court rejected as unconstitutional fixed gestational limits for determining viability. The Court reaffirmed these rulings in *Colautti v. Franklin* [439 U.S. 379 (1979)].

With one giant step, Nobel laureates James Watson and Francis Crick hurled researchers into the Genetic Age. No longer are scientists content with atomic experiments of the past Nuclear Age. Now, living "subjects" are required. And our attitude toward those "subjects" has shifted in an effort to view them as "somewhat less than human," which thus allows more experimentation. Watson once commented: "No one should be thought of as alive until about three days after birth," and added that parents could then "be allowed the choice" to keep their baby, or "allow" the child to die (1973, p. 13). The other member of that famed partnership, Francis Crick, went on record as stating: "No newborn should be declared human until it has passed certain tests regarding it genetic endowment, and that if it fails these tests it forfeits the right to life" (as quoted in Smith, 2000, p. 55).

RU-486–AN ABORTION ALTERNATIVE?

On September 28, 2000, the United States Food and Drug Administration approved mifepristone for sale in the United States for use in ending early pregnancies (up to 7 weeks after a missed menstrual period). In the approval notice, the drug was described as a "safe, effective, and non-invasive way" of ending a pregnancy. Known more commonly as RU-486, this pill is now the preferred form of abortion in at least 14 countries, including the United Kingdom and Israel. Thanks to Chinese manufacturers, it currently is marketed and available under the name Mifeprex in the United States. That's right-the country that strictly limits the number of children families can have, and that reports an estimated 10 million abortions each year, was awarded a multimillion dollar trade deal to produce America's abortion pill. Mifepristone was first developed by a French pharmaceutical firm, and was approved for use in France in 1988. Since then, more than 620,000 European women have taken mifepristone, in combination with a prostaglandin, to terminate their pregnancies. [Is it mere coincidence that RU-486 was developed originally by a drug company whose parent corporation manufactured Zyklon B-the poison gas used in Nazi concentration camps to destroy millions of lives?]

HOW IT WORKS

Mifepristone is a synthetic steroid designed to interfere with the embryo's ability to adhere to the uterine lining. A pregnant woman is given three, 200-milligram pills by mouth. The drug interferes with the flow of blood and nutritional elements from the wall of the uterus to the developing embryo. Deprived of support, the embryo dies. Returning to the doctor two days later, the woman takes two, 200-microgram pills of misoprostol (a prostaglandin that induces uterine contractions), and soon after aborts the embryo. [The woman remains in the physician's office for several hours of observation.] The prostaglandin, not the mifepristone, causes the most common side effects: vaginal bleeding, cramping, nausea, and diarrhea. The fetus may be expelled via blood clots either during the observation period, or later at home or at work, but almost always is aborted within 14 days of the treatment regimen. Women are required to return for a follow-up visit approximately 14 days after taking the mifepristone, to determine whether the pregnancy has been terminated. An RU-486 abortion costs approximately \$300 (about the same as a surgical abortion), according to Advances in Health Technology, Inc., a Washington, D.C., company established to market the pill.

Misoprostol (sold under the name Arthrotec) induces uterine contractions, and was developed originally to fight arthritis. The first line in the 2001 edition of the *Physician's Desk Reference* regarding Arthrotec reads: "Contraindications and Warnings: Arthrotec, because of the abortifacient property of the misoprostol component, **is contraindicated in women who are pregnant**" (p. 2977, emp. added) The warning goes on to state that "Arthrotec **should not be used in women of childbearing potential**..." (p. 2977, emp. added). And yet this arthritis drug is part of the deadly cocktail given to women who want a "non-surgical" abortion.

IS IT REALLY SAFE AND EFFECTIVE?

While the FDA has given its "stamp of approval," the words "safe" and "effective" hardly are words that would be used to describe this procedure. The following list of "drawbacks" was taken from a planned parenthood (pro-abortion) Website.

The possible **drawbacks**:

• There is a slightly greater risk of having an "incomplete" abortion when using the "abortion pill"—when this happens (maybe 4 percent of the time), the contents of the uterus are not completely shed (and the pregnancy is not ended). If it happens, women have to consent to have a "surgical" abortion to end the pregnancy completely.

- "Non-surgical" abortions require at least **three visits** to a clinic or doctor's office (instead of the two required for a surgical abortion). YOU MUST follow through with all three visits, or the abortion may not be completed and a damaged fetus might continue to develop. An abortion caused by the "abortion pill" may actually take place over several hours or days. With a "surgical abortion," the abortion is complete when you leave the clinic, and the abortion itself takes only ten or fifteen minutes.
- While some women experience "a greater sense of control over the process," others actually find "non-surgical" abortion to be MORE stressful than a "surgical" abortion. For example, with the "abortion pill," some women see small amounts of pregnancy tissue coming out of their vagina, and they may find this to be sort of traumatic (emp. added-BH/BT).

A FRIGHTENING "BENEFIT"

Additionally, the "abortion pill" now can be prescribed by almost any licensed doctor or nurse-practitioner (even though most "regular" doctors and nurse-practitioners cannot perform surgical abortions). In communities that do not have an abortion clinic, women often have to travel great distances for a surgical abortion, so "pro-choice" advocates view the increased capability of obtaining an abortion as a great victory. With the abortion pill, women may be able to obtain a non-surgical abortion from a local provider. This means that while your child's sore throat is being cared for in exam room #1 at your family practitioner's clinic, an abortion might be taking place next door in exam room #2!

RU-486 SUBSTITUTE: METHOTREXATE

Now that RU-486 has received FDA approval (and big profits are in the forecast), competitors are looking for substances that produce the same effects. Methotrexate is a prescription drug that was developed in the fight against cancer. Used in combination with misoprostol, it also causes an abortion. As with RU-486, a methotrexate abortion requires three visits to a clinic or doctor's office. During the first visit, methotrexate is given in the form of a shot. Then, a week later during a second clinic visit, the misoprostol is administered as a pill or in suppository form (the suppository is a capsule that is inserted deep inside the vagina, where it dissolves). After this, the uterus contracts and the baby is expelled. A third visit to the clinic is required to confirm that an abortion has, in fact, occurred. If a complete abortion has not taken place (which happens in approximately four percent of the cases), the woman then must have a surgical abortion in order to prevent the development of a damaged fetus (and related problems). Currently, the FDA has approved methotrexate for use as a **cancer treatment**. It is widely available in the United States, but not all healthcare providers are willing to use it for abortions. This procedure is still relatively new and somewhat controversial.

ANY WAY YOU PACKAGE IT, IT IS WRONG!

While many women are quick to celebrate the legality of RU-486 as a means of getting women "out of the stirrups" and "into their own homes," it does not change the fact that both surgical and non-surgical procedures end a baby's life. Whether by pill or curette, innocent lives are being extinguished. **Embryos are living human beings!** According to Paul Marx, the United Nations estimates that there are some 55 million abortions performed annually throughout the world (*Abortion International*, n.d., p. 1). On January 22, 1973, the nine justices that form the Supreme Court of the United States

voted (in a seven-to-two decision) to allow abortion as a legal method of destroying unwanted babies. Subsequent to that edict, the Centers for Disease Control in Atlanta, Georgia, reported the number of infants slain by abortion to be approximately 1.5 million each year—more than all the American lives lost in the almost 200 years of wars since our country's inception. In fact, in the unpopular 11-year-long Vietnam war, over 58,000 Americans lost their lives, yet this country's medical profession, via abortion, kills more than that in any given 11 days!

If a person shoots an eagle—the symbol of our country—the judicial system will throw him in prison and toss away the key. That same system will stop a multi-million dollar dam in the state of Tennessee to save an inch-long snail-darter fish, or fly the President of the United States to the northwest sector of America to discuss the fate of a spotted owl. Yet, should someone wish to destroy the human baby growing inside the mother's womb, such an act will be looked upon not only as entirely within that person's rights as an American citizen, but as perfectly legal.

It sometimes is suggested that abortion does not constitute taking human life. To those who offer such a suggestion, we ask: What is growing in the mother's womb? It is the result of the union of the human male sperm and human female egg– which guarantees its "humanness." And there can be no doubt that it is alive; if it is not, then leave it alone! "Oh, but we cannot do that," abortionists argue. Why not? Because in nine months the result will be a **living human child**! Abortion– all the disclaimers of its proponents notwithstanding–is the cold-blooded murder of a God-given life. And no rhetoric on the part of pro-abortion forces ever will change that fact.

While the U.S. Supreme Court outlawed the death penalty for hardened criminals, it simultaneously imposed that same penalty upon multiplied millions who never had committed a single crime. Their only "crime" was that they were not "perfect," or that they threatened to arrive at an "inconvenient" time. These tiny infants, still in the womb, are murdered by techniques that are crueler, more vicious, and more inhumane than any thus far devised by even Hollywood's worst gut-wrenching horror movies. These deaths occur in abortion clinics, doctors' offices, and hospitals around the world. The conspirators in this atrocity include potential mothers, consenting doctors, whining advocates of "planned parenthood," and approving judges. We lead western civilization in many areas, yet we have come to the point where life is so cheap that hospitals have been turned into slaughter houses, doctors have been turned into butchers, and our own children have been turned into "blobs of tissue" to be excised and unceremoniously dumped in the local landfill. We abhor from a distance the unspeakable crimes of Adolf Hitler as he murdered six million Jewish men, women, and children. Yet in our own land we snuff out the lives of countless millions far more defenseless than they. The announcement of an unwanted pregnancy, or one that likely will produce a less-than-perfect child, often is met with sheer hysteria. Years of having been taught evolution as a fact have taken their toll. As people have become convinced that man is nothing but a "naked ape," the value of human life has plummeted. And now the violence spawned by such thinking has reached even into the womb itself in what must be one of the most despicable of all actsmurder of the helpless!

Abortion is a violation of biblical morality, and should be opposed by every faithful child of God. The Proverbs writer stated: "These six things the Lord hates, yes seven are an abomination to Him: a proud look, a lying tongue, **hands that shed innocent blood**" (6:16-17, emp. added). What blood could be more innocent than that of a tiny infant not yet fresh from the womb?

Chapter 6

Tough Decisions Regarding... End-of-Life Matters

It was the call that every parent dreads. The phone ringing at that time of night could only mean one thing. As they wrestled to answer the phone and turn on the lamp, their brains quickly tried to comprehend what the person on the other end of the line was saying. Their 18-year-old daughter had been in a car wreck, and she was in critical condition. They needed to come to the hospital as quickly as possible. Once at the hospital, the nightmare only got worse. It turned out that this young lady had suffered a traumatic brain injury, and as a result, she was in a coma. Hours turned into days, which then turned into weeks. Slowly, this young lady emerged from her coma, only to proceed into a vegetative state. The parents tried to comprehend what their daughter's attending physicians were saying-using terms like "Glasgow coma scale," "persistent vegetative state," "cerebral atrophy," "low theta activity," etc. But all they **really** understood was that their beautiful daughter was lying unresponsive on a hospital bed, hooked up to all kinds of machines and tubes. She couldn't eat, she couldn't speak, she was incontinent, and her eyes-even though openwould not fix on them or anything else in the room.

Having a family member rendered unconscious is one of the most troubling of all scenarios. But in this day in age, when modern medical technologies often prevent the death of critically injured individuals, families sometimes are forced to face a new and even more stressful dilemma–what to do if a person **remains** in that "persistent vegetative state." Do we "pull the plug," or not? Do we "end the pain?" As the Baby Boomer generation ages, many are now facing difficult decisions about what to do with their parents. Diseases such as Alzheimer's and Parkinson's often ravage the mind, but leave the body intact enough that the person continues to live in such a way as to be unresponsive to the world around them. Additionally, increased production of automobiles has multiplied the number of motor-vehicle accidents, filling hospital beds with brain-injured patients. And even infants in neonatal intensive care units are occasionally subject to neurologic deficits that can leave them in a vegetative state.

What is a Christian to do during this most stressful of times? How do we make informed decisions that not only are wise medically, but also in accordance with the will of God? In the past, the only option was to listen to the doctors and do whatever they advised. Today, however, things have changed. Yet while more options exist, and while our justice system may consider a procedure "legal," that does not mean that the new procedure is right in the eyes of God. Medicine was traditionally a holy kind of work based on care and compassion. But in our society, it has become a business in which the principle of respect for "the sanctity of life" sometimes is lost amidst the desire to generate dollars. As such, Christians must prayerfully arm themselves with the wisdom they need in order to make appropriate choices-should they ever find loved ones in life-or-death situations. In this day and age, in which church leaders and preachers often find themselves counseling griefstricken families through times of crisis, it is important for both groups to have a firm foundation on which to give and receive counsel.

Here, we would like to analyze several life or death choices in light of God's Word, understanding that it is impossible to present every possible scenario. We must realize that different diseases and injuries result in different physiological factors-because we are all unique individuals. Thus, the "real world" often makes these scenarios less "clear cut." This is not to say that Christians should adopt a view based upon situation ethics. Rather, we should look at each individual case, keeping the sanctity of life in the forefront of our minds. All decisions should thus be formulated around biblical knowledge, a respect for human life, prayer, and a denial of self-interests or emotional desires. The object of this investigation is not to condemn those who have previously made uninformed choices, or to call a physician's advice into question-after all, physicians deal with these decisions on a daily basis, whereas many of us may never have to make such choices. Like a lighthouse, the information provided here is intended to allow the reader to set his or her course, guided by the beacon of God's Word. This study is merely a response to a need-the need to make sure that Christians have the biblical knowledge they require to face these new and pressing end-of-life matters.

DEFINING THE PROBLEMS

On occasion, we as writers find ourselves caught between the proverbial "rock and hard place." In order to convey accurate information, certain "less than interesting" details must be presented. Most readers shun such details, and often will lay aside material that contains such. And yet, we know that without those details, the "rest of the story" will remain, at best, confusing, and, at worst, unintelligible. So we ask you to please bear with us as we present the material in the next section, which will define, and give a brief background on, the terms that accompany so many ethical dilemmas. We believe your diligence and persistence will be richly rewarded.

Coma

Stedman's Medical Dictionary defines coma as "a state of profound unconsciousness from which one cannot be roused" (McDonough, 1994, p. 210). Following a traumatic injury, unconscious patients are said to be in a coma. Following several days or even weeks, patients who do not recover or die often will emerge from their coma to periods of wakefulness. This new state is referred to as a "persistent vegetative state." Bear in mind, however, that these patients still are unresponsive. One important difference in a comatose patient and a patient in a vegetative state is that patients in a coma do not normally go through sleep/wake cycles, and almost always have their eyes closed. While many kinds of coma can result in death, coma is potentially a reversible condition.

Persistent (or Permanent) Vegetative State

The term "persistent vegetative state" (PVS) was first described by Jennett and Plum in 1972 (1:734-737). [Many physicians find the original term **persistent** to be potentially misleading, as it suggests irreversibility.] Since that time, most physicians have opted to use simply a diagnosis of "vegetative state." Persons diagnosed in a vegetative state show no behavioral evidence of awareness of self or environment. There is brain damage, usually of a known cause, consistent with the diagnosis. In order for a person to be diagnosed in a "permanent" vegetative state, there should be no reversible causes present, and at least six (and usually twelve) months should have passed since the initial onset. Most often, these patients are not on ventilators, but may require artificial feeding.

Brain Death

Brain death (sometimes called whole-brain death) occurs when the entire brain–including the brain stem–is irreversibly damaged. In 1968, an ad hoc committee at the Harvard Medical School formulated a set of criteria for diagnosing brain death that included unresponsiveness, absence of spontaneous respiration, and loss of brainstem reflex activity. All brain functions have ceased. There are no sleep/wake cycles. The President's Commission report (1981) proposed an updated version of the Harvard criteria, and as such, the modified Harvard criteria are gaining acceptance for determining brain death (more on this modification later). Patients who are brain dead are routinely placed on ventilators to keep their organs "alive" because their brain is unable to signal the lungs to inspire.

"Locked-in" Syndrome (or Midbrain Death)

A person with locked-in syndrome shares many similarities to PVS, since the person is almost completely paralyzed. But there is a major difference. Locked-in patients are aware of their surroundings, and often can move their eyes purposefully. They are conscious, and can communicate with those around them. Sadly, however, they are "locked-in" to a body that does not allow them to move. James Brennan experienced this "locked-in" syndrome on May 28, 1986, when he suffered a stroke on his way to the Philippines for vacation. Brain scans revealed massive cell death in Brennan's midbrain. Yet he has able to communicate via rudimentary Morse code, and was aware of what is going on around him.

Terminal Sedation

The American Medical Association defines terminal sedation as "the use of high doses of sedatives to relieve extremes of physical distress. Its purpose is to render the patient unconscious, to relieve suffering until the patient dies from his or her disease processes and their complications" (see *AMA Ethics Glossary*). Thus, someone receiving terminal sedation would be put to sleep until they died from their original disease or injury.

The Double Effect

The term "double effect" is used in medicine when drugs are administered with the intent of relieving pain, and death then occurs as an unintended consequence (the action is not considered to be euthanasia). Even though the result may be expected, as long as the "intent" was not to hasten death or kill the patient, the action is not prohibited by general bioethics principles. This is seen most often in patients who receive high doses of painkillers. At very high dosages, drugs such as morphine can reduce the activity in the medulla of the brain to the point that respiration ceases and the patient stops breathing and dies. Occasionally, it is difficult for a doctor to determine the severity of pain in a patient who is unconscious or otherwise unable to communicate. If the amount of pain in the patient is unknown, doctors may not be sure of the actual amount of morphine that should be used, or even if morphine should be administered at all.

Advanced Directive (Living Wills, Power of Attorney, DNR Orders)

An advanced directive is a document that has two parts. The first part allows an individual to appoint a health-care agent to make medical decisions for them when they become unable to do so. The second part, which often is called a living will, allows people to state specifically what care they do or do not want to receive at the end of their life. Contrary to popular opinion, most state laws regarding living wills do not allow an individual to avoid pain and suffering from an illness. They are used primarily to limit the medical options, should a person become unconscious or unable to make his or her decisions.

Artificial Feeding (Tube Feeding)

Most of us know it as "tube feeding." This procedure provides patients with artificial nutrition from a (chemically balanced mix of nutrients) through a tube. This artificial feeding takes place primarily by three different methods. The first is via a tube that is inserted through the nose (nasogastic or "NG" tube). The second is a gastrostomy tube (G-tube). The most common of these are the percutaneous endoscopic gastrostomy tube (PEG tube) or a surgically placed feeding button (Mic-key or Bard button). These require a safe, fairly routine surgical procedure to implant the tube directly into the stomach. Most patients receiving PEGs are elderly, while feeding buttons are seen more commonly in pediatric patients. Between 1988 and 1995, the number of elderly, hospitalized patients undergoing this procedure increased from 61,000 to 121,000 (Grant, et al., 1998). The third is a jejunal tube. During a jejunostomy procedure, a tube is inserted surgically through the abdominal wall into the small intestine. These three feeding devices are usually placed into individuals with normally functioning gastrointestinal tracts in order to provide nutrition for those who cannot, or will not, eat. (Oftentimes, pediatric patients have buttons placed because of an abnormal or repaired GI tract such as a tracheoesophageal atresia, fistula, chronic gastroesophageal reflux, etc.)

Glasgow Coma Scale

The Glasgow Coma Scale is the standardized system that physicians use to assess the degree of brain impairment in order to determine the seriousness of injury in relation to an expected outcome. The Glasgow Coma Scale involves three determinants: (1) eye opening; (2) verbal responses; and (3) motor response (movement).

Each determinant is evaluated separately, according to a numerical value that indicates the level of consciousness and the degree of dysfunction. Scores run from a high of 15 to a low of 3. Persons are considered to have experienced a "mild" brain injury when their score is 13 to 15. A score of 9 to 12 is considered to be indicative of "moderate" brain injury, and a score of 8 or less reflects "severe" brain injury.

Physician-Assisted Suicide

The American Medical Association notes that "physicianassisted suicide occurs when a physician facilitates a patient's death by providing the necessary means and/or information to enable the patient to perform the life-ending act" (see AMA E-2.211 Physician Assisted Suicide). According to the physicians' code of ethics, allowing doctors to participate in assisted suicide would cause more harm than good. Physician-assisted suicide is fundamentally incompatible with the physician's role as a healer, would be impossible to control, and would pose serious societal risks.

DECISIONS AND THE LAW OF CAUSE AND EFFECT

One of the arguments used in the creation/evolution controversy is the law of cause and effect. Creationists correctly argue that for every material effect, there must be an adequate antecedent cause. Thus, in looking at the Universe as an effect, one must answer the question as to what caused it? It is valuable to use this same line of reasoning when considering ethical decisions. Is the person going to die naturally-as an effect of some disease or injury? Or, is their death caused by a decision) a family member makes? In approaching medical situations in this manner, biblical answers become a little easier to identify. Clearly, God has appointed a time for each person to die (Hebrews 9:27), and thus we should not fear or shun death. After all, for faithful Christians, this is a time to rejoice as we prepare for a heavenly "homecoming" (John 14:1-3). But as loved ones get closer to that heavenly goal, we must make sure that **our decisions** do not become the actual cause of their deaths.

Prior to the 1960s, physicians made the majority of decisions regarding particular treatments. This paternalistic role for physicians was accepted by both the patients and the professionals as the way things should be. But as treatment options have increased, and with the emergence of the legal doctrine of "informed consent," the concept of patient autonomy has taken over medical paternalism. Individual patient's values now take precedence over the values or intentions of clinicians. So, as modern medical technology has afforded us more (and often more difficult) choices, decision making has shifted from the physician to the patient. As such, we must understand that we are responsible to God for our lifestyle and health-care choices. To complicate matters, many individuals now are having to make these difficult choices for their loved ones—without being fully informed of their loved ones' desires.

Life is a gift from God. In fact, Paul, as recorded by Luke, noted that we are the offspring of God (Acts 17:28). Writing to the church in Rome, he noted: "For if we live, we live to the Lord; and if die, we die to the Lord. Therefore, whether we live or die, we are the Lord's" (14:8). Thus, we must respect the integrity of the life processes that God created-from birth to death, since Christ is "Lord of both the dead and the living" (Romans 14:9). Our decisions for our own care and treatment must reflect this divine truth. Rather than focus on each and every ethical decision an individual must make in regard to his or her own life, we will focus here on the topic of surrogate decision makers. That is to say, as Christians, what decisions are we allowed to make, once a loved one has been traumatically injured or has contracted a terminal disease? What will the effect be of the decisions we make for our loved one?

DO I NEED AN ADVANCE DIRECTIVE OR LIVING WILL?

In 1967, Louis Kutner proposed a written document that allowed a person to express his or her treatment wishes—he called it a living will. His proposal went virtually unnoticed until several landmark cases made headline news. Less than ten years later, in 1976, California became the first state to enact a law (The Natural Death Act) recognizing the validity of an advance directive. In 1990, the Patient Self-Determination Act was passed by Congress as an amendment to the Omnibus Budget Reconciliation Act, requiring all healthcare facilities that received federal funds to ask each patient on admission if he or she has an advance directive. Generally, there is no legal difference between an advance directive and a living will—both refer to the legal agreement that gives someone the authority to make medical decisions for another person (these legal terms do vary from state to state, so be aware of the terms used in your state). **Today, living wills allow a person, while still competent, to communicate to family or physicians what he or she wants done should incapacitation occur.** Currently, only about 10-15% of the adult population in the U.S. has completed advance directives.

Living wills and advanced directive forms are almost standardized. In fact, forms that meet your specific state requirements often can be printed from the Internet. However, since most states have passed some type of "advanced directive" legislation, it is important for individuals to know exactly what is accepted and required in their home state. These forms normally discuss the extent of treatment options that individuals desire regarding pain medicine, life support, feeding tubes, antibiotics, etc. Additionally, many states require a "durable power of attorney," which designates a person whom you choose to make your treatment decisions in the event that you are unable to do so. In many ways, this has an advantage over the living will, in that it is more flexible and can accommodate most types of medical situations. Living wills often are constrained, in that they cannot predict every possible scenario. Also, living wills are subject to some "interpretation," as not everyone would define "extraordinary" treatment the same way (e.g., are food and water ordinary or extraordinary treatment?). The difference between a living will and a durable power of attorney is that the durable power of attorney gives someone you trust the legal authority to review your case when you find yourself in a specified medical condition.

The controversy over advance directives is not unwarranted. Many right-to-life supporters suspect that this is merely a method for right-to-die advocates to impose their values. Because words like "comfort" and "dignity" are employed, they fear that, over time, procedures like euthanasia will be worked into the forms. Trevor Major noted: "Discussions at several euthanasia conferences in the mid-1980s made it evident that living will acts are simply the first item on the agenda (Hobbs, 1986, pp. 6-9). Once the 'right to die' idea is accepted and its meaning broadened, then the 'right to kill' can be incorporated into living wills" (1991). But the forms themselves are not inherently bad. Is there anything inherently wrong with a document that details how you want to be cared for? Utilizing these forms can help ensure that you are treated in a manner in accordance with God's will. No one is obliged morally or legally to accept or reject medical treatments. Thus, as long as we make those decisions with the sanctity of life and the sovereignty of God in mind, then there is no conflict. In fact, this will leave little confusion in the mind of your family and physician as to how you expect to be treated.

Unfortunately, the effectiveness of living wills leaves much to be desired. Oftentimes, unless a family member is waving it in the face of an emergency room physician, or it is placed clearly on the medical chart of a hospitalized patient, then physicians are unaware of its existence; thus, the living will is ignored in an emergency situation. Oftentimes, a "do not resuscitate" (DNR), or its close cousin, the "do not escalate care order" (DNEC), proves much more useful in a clinical setting. The DNR order frequently is better tailored to a loved one's situation because caregivers will sit down with the family and explain all the things that can happen in a "code" (potentially fatal) situation. This allows the family to give very specific orders regarding what to do should the patient's organs begin to fail, or should the heart stop beating. The DNEC order is similar, and allows families to withhold "heroic measures" if a patient is near death and begins to deteriorate in health. Again, however, the key is knowing what the patient wants before he or she is in that situation, and ensuring nothing that occurs that violates the sanctity of life.

WHAT SHOULD A CHRISTIAN DO IF A LOVED ONE IS IN A COMA?

Head trauma is the number one cause of death and disability among people between the ages of one and forty-four. As such, most people have heard of, or are somewhat familiar with the term, coma. Since this is the "initial" state in which head injury patients find themselves, this is the ideal starting place for examining ethical decisions. For families, frustration and anguish are only exacerbated by questions about the best choices for care, insurance coverage, and moving the comatose person from various units (SICU, NICU, CCU, etc.), not to mention the mind-numbing issues raised as a result of the loved one's sudden coma. Normally, coma patients are graded using the Glasgow coma scale.

Coma involves two different concepts. (1) **Reactivity** refers to the innate (or inborn) functions of the brain, i.e., the telereceptors (eyes and ears), the nociceptors (responses to pain), the arousal reaction (wakefulness), and the orienting response (turning one's head toward the source of sound or movement). We also could refer to these as reflexive movements. (2) **Perceptivity** refers to the responses of the nervous system to stimuli, which have been learned or acquired, i.e., language, communication skills, individual methods of movement such as gestures, etc. Perceptivity also refers to less-complex learned or acquired reactions, such as flinching when threatened. We also can think of these as conscious movements.

A person in a coma does not exhibit reactivity or perceptivity. He/she normally cannot be aroused by calling his/her name, or as a response to pain. Many people are surprised that all stages of coma do not resemble what we have been taught to expect—a deep sleep. The person in the coma may exhibit movement, make sounds, and experience agitation. It is important to keep in mind that the coma patient may exhibit reflex activities, that mimic conscious activities. However, these movements are not reactive or perceptive in their nature.

Individuals caring for critically injured patients stress that it is very important to remember to speak positively to, and in the presence of, the person in a coma. Some patients claim to remember very distinctly events that occurred while they were in a coma. And although we cannot be positive about the level of awareness in any particular case, studies show that a positive attitude may be beneficial to the recovery of the patient. In making decisions concerning someone in a coma, it is best to be longsuffering. Since the brain is confined in a hard, bony case, it does not have the space to swell, as an arm or a leg might. This initial swelling, or edema, suppresses the brain. Sometimes this suppression is severe enough that a coma results. When this edema subsides, the suppression of the brain that resulted from the swelling ceases, and the individual often regains consciousness. By allowing the edema to decrease or disappear, often the individual can be properly evaluated to determine the extent of the injury that has been sustained. [NOTE: There are some clinical conditions-such as untreatable uncal herniation, severe diffuse axonal injury, bacterial meningitis with large cerebral abcesses, etc.-that are caused by or can cause cerebral edema.] Normally, patients will either expire or emerge after a given period of time. One of the difficulties doctors have in assessing comatose patients is that they receive no verbal feedback from the patients themselves; thus, they are dependent on information garnered by physical examination (i.e. papillary light reflex, corneal reflex, oculocephalic reflex, gag reflex, apnea test, etc.). As Robert Veatch observed: "Measuring irreversible loss of capacity for a brain function such as consciousness involves fundamentally nonscientific value judgments" (1993, p. 23). Thus, while the comatose individual is still alive, and while his or her future is uncertain, we must remain patient, and help those who are weak (Romans 15:1).

AN EXAMINATION OF THE VEGETATIVE STATE

"Mom, I love you." According to the New England Journal of Medicine, these were the words written by the young seventeen-year-old girl more than fifteen months following the car accident mentioned at the beginning of this chapter (Childs and Mercer, 1994, 334:24). At fifteen months, nurses started noticing rare and inconsistent responses to certain commands. Three years after the injury, she was communicating using eye blinks for yes and no. Five years after the injury she could follow conversations and was communicating by mouthing words and short phrases. The article noted: "She enjoyed pampering and her mood was usually euphoric.... She had no behavioral evidence of depression or despondency over her deficits. She enjoyed humor, making jokes and teasing her caregivers" (334:24). While she remained wheel-chair bound and totally dependent for her care, the young lady was discharged and allowed to return home 5.2 years after the injury. The importance of this story should not be overlooked, and was not missed by the authors of the article, who lamented:

More relevant is the risk of prognostic error in patients in a persistent vegetative state who survive for 12 months. The available data are insufficient to provide a trustworthy estimate of the incidence of late improvement, because of erratic follow-up, incomplete reporting, and uncertain diagnosis.... In retrospect, one could not predict the eventual improvement in our patient (334:24).

This recovery should not come as a surprise. In a 1994 Multi-Society Task Force review of the scientific literature, half of the head-injury patients who were vegetative at one month had regained consciousness after a year, as had one-third of those who were vegetative for three months. In fact, one study concluded: "The diagnosis of the permanent vegetative state cannot be absolutely certain. There is no standard test of awareness and data on prognosis are limited" (Wade, 2001, 322:352, emp. added). Persistent (or permanent) vegetative state is clinically defined as "a loss of any meaningful cognitive responsiveness, presumed lack of awareness and therefore consciousness, while there is spontaneous breathing and a range of reflex responses as well as periods of wakefulness (eyes open)" (Adams et al., 2000, 123:1327, parenthetical item in orig.). Jennet noted that "it is often described as loss of function in the cerebral cortex while the function of the brainstem is preserved" (1997, 12:1-12).

The Multi-Society Task Force observed: "The perceptions of pain and suffering are conscious experiences; unconsciousness, by definition, precludes these experiences" (see Multi-Society...," Part 2, p. 1576). At first glance, this explanation seems valid. Yet, look at the implications. Since animals are not self-conscious, then according to this statement, they cannot feel pain. And who, upon kicking a dog or cat, would not expect that animal to yelp or sound out in pain? As Howsepian remarked, this is "at best counterintuitive and at worst patently false" (n.d.).

As Christians, we must understand that there is a very real danger that those who have been diagnosed as being in a vegetative state will, in fact, be viewed as "vegetables" and, therefore, "subhuman." These patients are still very much alive by all commonly accepted medical and ethical criteria. Life is life. An individual's self-worth is not dependent on mobility and/or function. Rather, it rests in the fact that every human has been created in the "image and likeness of God." Godnot man—is the One Who establishes humanity's sinificance. Another key problem with this syndrome is the name itself: persistent (or permanent) vegetative state—the notion being that the individual lying there is never going to recover to live any type of "useful" life. However, the case above (and many like it) suggest(s) otherwise.

The American Medical Association estimates that 10,000 to 25,000 adults, and 4,000 to 10,000 children, currently are living in a PVS in the United States. The vast majority do not require assistance for breathing, but many require artificial feeding. Disconnecting those people from food and water would result in the death of more than three-to-five times the number of people killed in the 2001 World Trade Center attack! Yet, given proper nutrition and care, these patients can live in this state for many years (the longest PVS case on record is 41 years)-having not improved much if any during those intervening years. The legal argument is straightforward. Patients must consent to any treatment they receive; otherwise, the doctor is liable for battery to that person. But vegetative patients are unable to provide consent; therefore, they can be treated only if it is in their best interests-something decided by a surrogate decision maker.

A landmark case in 1990 was heard by the United States Supreme Court. A young lady named Karen Ann Quinlan had a cardiopulmonary arrest in 1975, apparently caused by a combination of alcohol and tranquilizers. Although she was considered to be unresponsive and in a permanent vegetative state, she responded when pinched. As such, her doctors maintained her on a ventilator. Karen's father, Joseph Quinlan, wanted to remove the ventilator. He eventually took the hospital to court and won the case in the New Jersey Supreme Court. He was allowed to "pull the plug." [What many individuals are not aware of is that contrary to expectation, the neuropathological findings in the brain of Karen Ann Quinlan showed that the most severe damage was not in the cerebral cortex—as expected—but rather in the thalamus. Hannah Kinney and colleagues reported that the "brain stem and basal forebrain and the hypothalamic components of the ascending arousal systems and brain-stem regions critical to cardiac and respiratory control were undamaged" (1994, 330: 1469).]

By definition, individuals who are in a vegetative state are living. In spite of the push to "update" the definition of death, currently, someone in PVS is neither dead nor brain dead. Biblical teaching regarding man acknowledges that he is composed of two distinct parts-the physical and the spiritual. We get an introduction to the origin of the physical portion as early as Genesis 2:7 when the text states: "Jehovah God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul (nephesh chay*yah*)." It is important to recognize both what this passage is discussing and what it is not. Genesis 2:7 is teaching that man was given physical life; it is not teaching that man was instilled with an immortal nature. The immediate (as well as the remote) context is important to a clear understanding of the intent of Moses' statement. Both the King James and American Standard Versions translate nephesh chayyah as "living soul." The Revised Standard Version, New American Standard Version, New International Version, and the New Jerusalem Bible all translate the phrase as "living being." The New English Bible translates it as "living creature."

The variety of terms employed in our English translations has caused some confusion as to the exact meaning of the phrase "living soul" or "living being." Some have suggested, for example, that Genesis 2:7 is speaking specifically of man's receiving his immortal soul and/or spirit. This is not the case, however, as a closer examination of the immediate and remote contexts clearly indicates. For example, the apostle Paul quoted Genesis 2:7 in 1 Corinthians 15:44-45 when he wrote: "If there is a natural body, there is also a spiritual body. So also it is written, 'The first man Adam became a living soul.' The last Adam became a life-giving spirit." The comparison/ contrast offered by the apostle between the first Adam's "natural body" and the last Adam (Christ) as a "life-giving spirit" is absolutely critical to an understanding of Paul's central message (and the theme of the great "resurrection chapter" of the Bible, 1 Corinthians 15), and must not be overlooked in any examination of Moses' statement in Genesis 2:7.

What, then, of the second part-the spiritual? Genesis 1: 26-27 records: "And God said, Let us make man in our image, after our likeness And God created man in his own image, in the image of God created he him; male and female created he them." Nowhere does the Bible state or imply that animals are created in the image of God. What is it, then, that makes man different from the animals? The answer, of course, lies in the fact that man possesses an immortal nature. Animals do not. God Himself is spirit (John 4:24). "Spirit" by definition, "does not have flesh and bones" (Luke 24:39). In some fashion, God has placed within man a portion of His own essence-in the sense that man possesses a spirit that never will die. The prophet Zechariah spoke of Jehovah, Who "stretches out the heavens, lays the foundation of the earth, and forms the spirit (ruach) of man within him" (12:1). The Hebrew word for "forms," yatsar, is defined as "to form, fashion, or shape (as in a potter working with clay;" Harris, et al., 1980, 1:396). The same word is used in Genesis 2:7, thereby indicating that both man's physical body and his spiritual nature were formed, shaped, molded, or fashioned by God.

Solomon, writing in the book of Ecclesiastes, noted that "the dust will return to the earth **as it was**, and the spirit will return to God who gave it" (12:7, emp. added). Man's physical body was formed of the physical dust of the Earth, and one day it will return to it. In James 2:26, James made this observation: "...the body apart from the spirit is dead." The point, of course, was that when the spirit departs the body, death results. But there is an obvious, and important, corollary to that statement. If the body is alive, it must be the case that the spirit is present. This is a biblical principle that cannot, and must not, be ignored—especially in light of the present controversy. Is the person being cared for alive? Yes. Is the soul present? Again, according to the Bible, the answer is clearly yes.

Does God give man the right to terminate innocent life in which He has instilled a soul? No. This realization-that Christians should not prematurely terminate the life of someone in a PVS-may not be welcomed by some individuals. In fact, family members who have had to struggle with watching their loved one exist in a state far removed from their previous existence may take offense at such a suggestion. After all, they are the ones that have to bathe, feed, turn, change, and tend to the individual. They are the ones that watch bedsores come and go, and are forced to shuffle their lives, careers, and families around ICU visiting hours. Seeing their loved one so helpless has led many to subscribe to the mantra that those in a vegetative state "have no quality of life; there is not a person there." Rather, the body is simply a "functioning corpse, not a living person." How, then, would one explain the awakening of Gary Dockery after 71/2 years in a PVS? Upon awakening, he talked eighteen hours, recalling family members' names, names of pet horses, etc.

Or how about the eighteen-year-old girl who remained in a vegetative state for 2½ years following a traffic accident? She then began to show signs of responsiveness. Six years after the accident, she was able to comprehend and communicate, and, according to her doctors, "shows considerable interest in her surroundings and is able to establish interpersonal relationships. **Moreover, the improvement is still continuing**" (Arts, et al., 1985, 48:1300, emp. added). In 2003, a study was conducted by Marcela Lippert-GrUner, Christoph Wedekind, and Norfird Klug. They analyzed twenty-four patients in an effort to determine the outcome of prolonged coma following severe traumatic brain injury (Lippert-GrUner, et al., 2003). One year after the traumatic brain injury, six patients had died, three remained in a vegetative state, six were severely disabled, six were moderately disabled, and three had achieved good recovery. These results indicate that there is a full spectrum of possibilities when dealing with those affected by brain injury.

As evinced by Dockery's case and this one-year-long study, there are no 100% foolproof methods of determining one's outcome. In fact, brain pathology is not even a good indication of the syndrome itself. Adams and colleagues

have considerable experience of the neuropathological abnormalities in patients who remained severely disabled but not vegetative as a result of an acute brain insult. In some of these brains there were lesions similar to those found in some of the vegetative patients, particularly the traumatic group.... It is clear...that this condition can occur in patients in whom there are no identifiable structural abnormalities in the cerebral cortex, the cerebellum or the brainstem (2000, 123:1336).

In a paper titled "Misdiagnosis of the Vegetative State: A Retrospective Study in a Rehabilitation Unit," specialist Keith Andrews noted:

... of the 40 patients referred as being in the vegetative state, 17 (43%) were considered as having been misdiagnosed.... Most...were blind or severely visually impaired. All patients remained severely physically disabled, but nearly all were able to communicate their preference in quality of life issues—some to a high level.... Recognition of awareness is essential if an optimal quality of life is to be achieved and to avoid inappropriate approaches to the courts for a declaration for withdrawal of tube feeding (1996, 313:13-16).

Given that diagnoses can be difficult, and knowing that the person is alive, Christians are left with a singular option. They must ensure the sanctity of life, and comfort their loved one through this traumatic period. We must ask: Are we trying to end our *loved one's* suffering, or *our own*?

BRAIN DEATH-WHOLE OR PARTIAL?

Brain death (BD) is not the same as persistent vegetative state. The two conditions are totally different, and as such, families making decisions regarding a patient that is brain dead must keep this in mind. As Cabrera-Lima noted: "If we keep in mind the present concepts of BD, it's not correct to homologate both terms.... It is not ethical to withdraw a medical treatment of a patient, when we know there is the structural possibility of recovering some functions [as occasionally is the case with PVS–BH/BT]" (1999, 28:1104). Often, when we hear people discussing "pulling the plug," they are referring to an individual who has been classified as brain dead. Individuals who are brain dead cannot breathe on their own; thus, ventilators are required to oxygenate their blood (see also the chapter on organ donation).

Robert Veatch, director of the Kennedy Institute of Ethics at Georgetown University, has been highly influential in recent discussions of the definition and determination of death. Veatch observed that there is

widespread agreement that two separate issues are really at stake in the debate over the determination of death. The first question is essentially philosophical, conceptual, and ethical: Under what circumstances do we consider a person dead? The question is asked in several ways. What are the necessary and sufficient conditions for a person to be alive? What is the essential characteristic of persons such that its loss can be said to constitute death?... Once a concept of death has been chosen, one can turn to a second, more scientific question: How, empirically, does one measure the irreversible loss of whatever functions have been determined to be essential for life? (1986, pp. 144-145).

One of the four categories Veatch suggested for defining death was "neocortical death." This is a "new" definition for brain death that many are trying to defend in an effort to free up additional donor organs—a position that clearly is a slippery slope. This category places the locus of death in the neocortex (the outer layer of the brain covering the cerebrum). This is sometimes called "cerebral death," "higher brain death," or the "apallic syndrome." According to Robert Rakestraw,

when neocortical functioning is irreversibly lost (as determined by a variety of criteria, including the EEG) the person is dead, because the concept of death in this case is the "irreversible loss of consciousness or the capacity for social interaction" or both. This is the condition of PVS individuals. According to definition three, these are not dead. Those who would say that such are dead focus on the neocortex because it appears to be the biological precondition for consciousness and selfawareness, the basis of personal life and social interaction. But because those in PVS are clearly not dead biologically, and because cases of recovery-though extremely rare-have been known for those who were thought to have lost neocortical function, no national or state government nor any religious body has officially endorsed neocortical death as an acceptable understanding of death (1992, parenthetical item in orig.).

Rakestraw correctly noted: "While neocortical destruction is a necessary condition for diagnosing death, it is not considered sufficient by various official bodies." Some might ask, why proceed with "extraordinary" measures for brain-dead patients? After all, aren't vegetative patients and brain-dead patients in the same predicament? No. Comatose or vegetative patients suffer from a **decrease** in brain function, and thus, the person is alive—with a chance of regaining consciousness. Brain death is the irreversible **absence** of all brain function. There is no chance of recovery with brain death. When someone is brain dead, it means there is no oxygen or blood flow to the brain. The brain no longer is functioning in any capacity, and never will again. Neurons are undergoing necrosis. However, it does not mean that all other organs (such as the heart, kidneys, or liver)are no longer viable. And this is where the confusion arises.

Legal death happens at the point of irreversible cessation in brain activity. Brain activity is a necessary condition to legal personhood, and, perhaps with the exception of early stage embryos, it is a sufficient condition for legal personhood. The recorded time of death is when the physician actually pronounces the patient dead. Many patients are pronounced dead on the basis of brain death (with the heart still beating)medically and legally, the patient is dead at that point-while others are pronounced dead after all the machines have been turned off and the heart stops beating. But here again we must realize the caution Christians must take in making these decisions. Great care must be taken not to declare a person "dead" even one moment before death actually has occurred. Death should be declared only after, not before the fact. A person who is dying is still alive, even a moment before death, and must be treated as such.

Thus, Christians must realize that whole-brain death is the only criterion we can accept for the end of life. "Pulling the plug" on an individual who has suffered from "only" neocortical death is, in essence, killing a living person (cf. Genesis 9:6).

SHOULD CHRISTIANS STOP ARTIFICIAL FEEDING AND HYDRATION?

It was January 11, 1983, when Nancy Cruzan's car hit a tree, throwing her out of the car into a nearby ditch. Paramedics found her approximately 18 minutes later. She was not breathing, and had no heartbeat. Although they were able to reestablish her heartbeat and breathing, she never regained consciousness. Her parents were appointed guardians, and eventually asked the hospital staff to terminate the artificial nutrition and hydration procedures that kept her body alive. However, the staff refused to comply without court approval. The Missouri court ruled in favor of the family, but the State Supreme Court and U.S. Supreme Court ruled against them. It was only after hearing "clear and compelling" evidence that the court allowed Joe and Joyce Cruzan to remove the tubes that provided Nancy with food and water. Twelve days later, at the tender age of 33, Nancy died from dehydration.

The courts have ruled that there is no difference between the termination of artificial nutrition and hydration and other forms of medical treatment, and as such, food and water can be withdrawn. **We would argue strongly against such a ruling**. Food and water represent standard care for any living individual (and even animals!)—they are, in fact, the sustenance of life. Stopping food and water will **undoubtedly** lead to death within 14 days. Plainly put, **the individual will die from dehydration—not the disease or injury that caused their hospitalization**. Who would intentionally withhold food and water from any loved one, regardless of age or physical conditions? Jesus cautioned: "For I was hungry and you gave Me food; I was thirsty and you gave me drink" (Matthew 25:35).

Additionally, there is ample evidence today that unconscious people **do suffer** if they die from dehydration (see Steiner and Bruera, 1998), and yet we submit individuals (who are unable to respond) to this cruel and inhumane treatment—in an effort to "ease their suffering?" In their conclusion discussing hydration in palliative-care [reducing the severity of, or alleviating the symptoms without curing, the disease-BH/BT] patients. Nathalie Steiner and Eduardo Bruera wrote: "Clinical research has shown that dehydration can lead to potentially severe complications, altering the patient's quality of life, including increased asthenia and accumulation of opioid metabolites with cognitive failure, generalized myoclonus, grand-mal seizures, and hyperalgesia" (1998, 14:12). Craig argued that death through dehydration is onerous for both the patient and the relatives, and that there is a powerful need to satisfy thirst (1994, 20:139). Removing food and water is not only malicious, but also represents homicide in the eyes of Almighty God. Some would argue that maintaining an individual with nutrition and hydration merely prolongs the person's "existence," not their life. Christians, however, must not accept or embrace any procedure that deviates from a general rule in which the sanctity of life is upheld. Joseph C. Howard rightly asserted:

We must recognize that the deliberate denial of food and water to innocent human beings in order to bring about their deaths is homicide for it is the choice to kill by starvation and dehydration. Such killing is seriously immoral and should never be legalized.... The fact that the killing is done by an act of omission makes it no less reprehensible (1994, p. 61).

We as Christians must recognize that the presence of brain activity indicative of a living person who has a right to nourishment. Having a feeding tube in place is not a "heroic measure," nor is it providing some type of "extraordinary care," but rather it is quite "ordinary" care. Other than to hasten the death of someone, what possible motive could someone have for removing this fundamental need? Ephesians 6:2 commands that each person is to "honor thy father and mother." According to 1 Timothy 5:8, failing to care for one's own family is a denial of the faith, and makes one "worse than an infidel." Just because someone is aged or vegetative, we are not to stop caring for and loving that individual. The psalmist lamented: "Cast me not off in the time of old age. Forsake me not when my strength faileth" (Psalm 71:9) Would our plea today be any different? Our decisions regarding our loved ones must take this into account, must they not?

CONCLUSION

God's Word tells us that death is a fact of life for all humans (Hebrews 9:27). Ecclesiastes 3:2 points out that there is, "a time to be born, and a time to die." The Bible also is clear that no man has the right to hasten another's death (Exodus 20: 13; Romans 13:9). For the "arm-chair" reader, the issues may seem abundantly clear. But to the husband who is facing the loss of a wife of forty years, or the parents faced with the decision of quitting their jobs and going on welfare in order to stay home and care for their invalid son or daughter, the matter is far less esoteric. In an age where our values often follow our pocketbooks, we are finding more and more excuses to free up hospital beds. Thus, it appears that the best "treatment" for individuals suffering from Lou Gehrig's disease (ALS), Parkinson's, Alzheimer's multiple sclerosis, and traumatic injury is–death!

When we come to end-of-life decisions—as many of us will our decisions must be centered on God's Word. Our instincts and insights are of no use, since they often are clouded by pain or emotion. Likewise, the laws of man are of little use, since what is **legal** may not be what is **right** in the eyes of God. Therefore, we must prayerfully request wisdom, which God promises to those who ask (James 1:5). Of all the times in our lives when we need to search earnestly for a "thus saith the Lord," or for the principles contained with the "perfect law of liberty" (James 1:25), surely these are such times.

Chapter 7

Tough Decisions Regarding... Euthanasia

The Hippocratic Oath contains the phrase: "I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary [a medicated vaginal suppository–BH/BT] to produce abortion." However, those words apparently hold little meaning to many physicians who have graduated from medical school in the last twenty years. Today, some physicians comment about taking the "Hypocritic" oath. In light of the changes taking place in our society, it is not surprising that only eight percent of doctors actually are willing to pledge to forswear abortion, **and only fourteen percent promise not to assist with euthanasia** (Smith, 2000, p. 20, emp. added).

The AMA defines euthanasia as "the administration of a lethal agent by another person to a patient for the purpose of relieving the patient's intolerable and incurable suffering" (see *AMA Code of Medical Ethics, Opinion 2.21*). According to their own code of ethics, physicians are to respond aggressively to the needs of patients at the end of life, but not engage in euthanasia. Glover defines three categories of euthanasia: (1) Voluntary: where the person is assisted to die in their best interests after a competent request; (2) Non-voluntary: where a person is assisted to die in their best interests, but without

being able to make such a request; and (3) Involuntary: where a person is helped to die, supposedly in their best interests, but against their expressed wishes (1977). The last of these scarcely could be distinguished from murder. Trevor Major observed that "euthanasia is a compound word derived from the Greek: *eu* meaning 'well,' and *thanatos* meaning 'death'" (1991). However this "good death," as many like to call it, is not as altruistic as it sounds.

In a prophetic article in the July 14, 1949 issue of the New England Journal of Medicine, Leo Alexander, an individual who had worked for the chief counsel for war crimes after World War II, examined the initial causes of the Holocaust. The beginnings, he stated, were merely a subtle shift in emphasis in the basic attitudes of physicians. It started with the beliefwhich is common today among those in the euthanasia movement-that there is such a thing as "a life not worthy to be lived." The Nazis often described the patients that they were killing as "useless eaters." Among those physicians who helped start the Nazi killing mentality was Ernst Wetzler, who, ironically, invented one of the first types of incubators for children born prematurely. In commenting on his gruesome acts, Dr. Wetzler called his participation in the murder of disabled infants in Germany "a small contribution to human progress" (as quoted in Smith, p. 43). It is not surprising, in light of recent attitudes here in the United States, that just before his death in 1984, Alexander warned that these same lethal attitudes were taking root in this country. Biomedical ethicist Amil E. Shamoo agreed, and wrote:

We in the United States don't have systemic atrocities, we have compartmentalized atrocities. But the intellectual underpinnings are the same as they once were in Germany: for the good of science; for the advancement of knowledge; for the benefit of society; for the national interest (as quoted in Smith, p. 47). What happens when the elderly members of society no longer feel loved, and begin to think of themselves as a "burden"? Consider the eighty-year-old grandmother with multiple medical complications who does not want to be a "bother" to her children. Society sometimes places very little value on the disabled and elderly, and therefore many are taking their own lives prematurely–either through suicide or euthanasia. Diane Coleman, founder of Not Dead Yet, stated: "There is a great revulsion against disabled people that is visceral. This disdain is masked as compassion but many people believe that in an ideal world, disabled people wouldn't be there" (as quoted in Smith, p. 28).

Columbia, Switzerland, the Netherlands, and Australia have all legalized euthanasia. On November 28, 2000, the lower chamber of the Netherlands' parliament became the first group to vote in favor of legalizing euthanasia (see Comiteau, 2000). In 1996, Australia's Northern Territory legalized medically assisted suicide for terminally ill patients. Elsewhere (such as in Colombia and Switzerland), governments have ruled that it is not a crime to help a terminally ill person die as long as they have given clear and precise consent. While the Swiss outlaw active euthanasia, there is leeway for doctors to assist in suicides where they provide patients with lethal drugs but then leave them alone to administer those drugs on their own. Other countries-such as Denmark, Singapore, portions of the United States, Canada, and Australia–give patients the right to refuse life-prolonging treatment. A new study from pro-euthanasia researchers, reports that euthanasia in the Netherlands continues to increase, and that doctors are killing not only the terminally ill, but also those with chronic conditions (Smith, p.110). As of 1995, more than 1 in 42 deaths in Holland was an assisted suicide. Even more alarming, 1 in 4 doctors admits killing patients without the patient's request or approval (Washington Post, 11/28/96, citing the New England Journal of Medicine).

The experience of the Dutch people makes it clear that legalization of assisted suicide and euthanasia is not the answer to the problems of people who are terminally ill. The Netherlands has moved from assisted suicide to euthanasia, from euthanasia for people who are terminally ill, to euthanasia for those who are chronically ill, from euthanasia for physical illness to euthanasia for psychological distress, and from voluntary euthanasia to involuntary euthanasia (Hendin, 1996).

The pattern is frighteningly clear. During the past thirty years, the Dutch have proceeded down the slippery slope by first killing terminally ill patients who **request** death. They then moved on to chronically ill persons **who asked** to be killed. And they now are killing infants born with defects, who by definition **cannot ask** to be killed.

Groups now even advertise on-line various types of "death products" (such as the "Exit Bag"-see Deathmart). For just a few dollars, you can order an "infoPAK" that will give you detailed information on the latest killing devices. Is it any wonder, then, that suicide took the lives of 30,575 Americans in 1998 (11.3 per 100,000 population) [see CDC-Suicide in the United States]. Sadly, more people die from suicide than from homicide. In fact, in 1998 the CDC reported that there were 1.7 times as many suicides as homicides. Overall, suicide is the eighth leading cause of death for all Americans, and is the third leading cause of death for young people aged 15-24. More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia, influenza, and chronic lung disease combined! What's going on around us? What has warped our mentalities so much that we find ourselves contemplating whether a life really is "worthy to live"?

In countries where it has been legalized, it is not considered a crime to help the terminally ill or elderly die, as long as they have given their consent. However, a survey in Holland reported that one in four doctors admits to killing patients without the patient's request or approval. But this atrocity does not take place just overseas. In 1994, the state of Oregon began forging the way for this same crime to take place in the U.S. An Oregon report on assisted suicide for the year 2000 documented that more patients than ever before took their lives because they felt they had become a "burden" to friends, family, and caregivers. In Oregon, where assisted suicide was legalized in 1994, doctors prescribed deadly drugs to 39 patients (and yet, when the local newspapers ran headlines bemoaning the state's soaring suicide rate among adolescents, nobody made any connection between the two). Of those 39 cases, at least 27 people were reported as having died from a deliberate lethal overdose of controlled substances under Oregon's assisted-suicide law. Additionally, the median time between a patient's initial request for assisted suicide and his or her death went from 83 days in 1999 to a mere 30 days in 2000. Interestingly, all of the patients who died under the Oregon law took barbiturates, which are regulated by the federal government. The 1970 Controlled Substance Act specifically states that drugs may be used strictly for "legitimate medical purposes." Does assisted suicide fit that definition? The American Medical Association (AMA) is on record as supporting abortion, yet this same professional organization has taken a firm stand in defense of life in the area of doctor-assisted suicide. In a medical brief, the AMA stated: "There is, in short, compelling evidence of the need to ensure that all patients have access to quality palliative care [reducing the severity of, or alleviating the symptoms without curing, the disease-BH/ BT], but not of any need for physician-assisted suicide..." (see AMA: Anti-Euthanasia, Pro-Pain Control).

U.S. Attorney General John Ashcroft issued a legal opinion that the use of these drugs is not medically "legitimate" under federal law. Ashcroft made his determination in a memo to Drug Enforcement Agency (DEA) head Asa Hutchinson in November 2002, stating: "I hereby determine that assisting suicide is not a 'legitimate medical purpose' under the federal Controlled Substances Act (CSA)" (see Ashcroft, 2001). He went on to note that "prescribing, dispensing, or administering federally controlled substances to assist suicide violates the CSA." Thus, any physicians who participated in dispensing these drugs for uses not intended by the manufacturer would risk losing their federally issued prescription licenses. However, Oregon-based federal district Judge Robert E. Jones issued a permanent injunction, barring the DEA from taking any action against Oregon doctors who prescribe lethal barbiturates, or any other federally controlled substance, for assisted suicides. States like Oregon already allow euthanasia, and it is only a matter of time before other states adopt their own versions of this murderous legislation.

Euthanasia-the killing of someone prior to their natural death-is totally unacceptable to God, regardless of the motive behind it. Recall the case of King Saul (1 Samuel 31:1-6), who was critically injured in battle against the Philistines. Rather than suffer the humiliation of the enemy taking him captive and possibly die slowly during torture, Saul begged his armor-bearer to plunge his sword through him. When the orderly refused, Saul attempted suicide. We read later in 2 Samuel of an Amalekite from a neutral nation passing by, and Saul begging him to take his life:

Then David said to him, "How did the matter go? Please tell me." And he answered, "The people have fled from the battle, many of the people are fallen and dead, and Saul and Jonathan his son are dead also. So Daivd said to the young man who told him, "How do you know that Saul and Jonathan his son are dead?" Then the young man who told him said, "As happened by chance to be on Mount Gilboa, there was Saul, leaning on his spear; and indeed the chariots and horsemen followed hard after him. Now when he looked behind him, he saw me and called to me. And I answered, 'Here I am.' And he said to me, 'Who are you?' So I answered him, 'I am an Amalekite.' He said to me again, 'Please stand over me and kill me, for anguish has come upon me, but my life still remains in me.' So I stood over him and killed him, because I was sure that he could not live after he had fallen" (2 Samuel 1: 4-10).

What happened to this Amalekite? We read just a few verses later where this man was killed for his act. But why? David described the act as "putting forth the hand to destroy" (2 Samuel 1:14). David believed the story to be true, and showed his disapproval of voluntary euthanasia by killing the Amalekite. From this, we see the biblical importance of the sacredness of life, and the need to preserve it. Prematurely ending the life of someone hardly could be considered doing good unto all men (Galatians 6:10). God charges His people to benevolently **care for** the poor, the aged, and the handicapped–**not kill them**.

Have we forgotten that with each death a soul steps into eternity forever, never to turn around and walk on this Earth again—a soul that one day be will be judged by our Creator. Leon Kass, who, in August 2001, was appointed by U.S. President George Bush to chair a national advisory committee on bioethics, stated: "To regard life as sacred, means that it should not be violated, opposed, or destroyed, and that positively, it should be protected, defended and preserved" (1990, p. 35).

Chapter 8

Tough Decisions Regarding... Organ Donation and Transplantation

Fifty years ago, there was no controversy. If someone's organs were failing, either from disease or poor genetic endowment, the only hope was medicinal therapy. Prior to modernday transplants, surgical interventions focused primarily on replacing limbs or teeth-although success rates were dismal at best. During the late nineteenth and twentieth centuries, a number of animal organs were transplanted-unsuccessfullyinto humans. But the seed took root. The first reliable report of transplant surgery is from 1823, when German surgeon Carl Bunger performed plastic surgery on a woman's nose, grafting skin from her thigh. In 1906, Austrian ophthalmologist Edward Zim performed the first corneal transplant, paving the way for surgeons to use dead or donated material. But the major breakthrough occurred in 1954 when two medical doctors, Joseph Murray and David Hume, performed the first successful living-related kidney transplant from identical twins. This opened the door to what soon would become the promise of renewed health and life for literally thousands of individuals. Almost fifty years later, doctors have reported successful heart, pancreas, pancreas islet cell, intestine, lung, liver, and heart-lung transplants. But the question arises, "Is this new medical technology in compliance with God's will?" What should Christians know about organ transplants, and should we support this ever-growing practice?

IS IT ACCEPTABLE?

The Red Cross lists "Statements from Various Religions" regarding their acceptance or rejection of transplantation practices (see Red Cross). The spectrum of positions taken by the various religious organizations listed ranges from those that strongly support organ donation as "an act of charity, fraternal love, and self sacrifice" to those who are strictly against such donations. Under "Church of Christ," the listing states very simply: "Organ transplants should not be a religious problem." While this may appear to answer the question of whether or not it is acceptable to support organ donation and transplantation, the truth is that this statement-in and of itself-is devoid of any real significance. The truth can be determined only from within the pages of God's Word, and it is there that we must go for guidance in answering controversial questions such as these. Most arguments for and against organ donation and/or transplantation fall into three categories-those centered on loving one's neighbor, those dealing with treatment of the body, and those that discuss the resurrection.

Love Your Neighbor

One of the strongest arguments for organ donation is the love and compassion such an act exhibits toward others. We all are familiar with the biblical premises of "loving our neighbors" and "doing unto others as we would have them do unto us" as we try to emulate Christ's unconditional love. While the command to "love your neighbor" was quoted by Jesus (Matthew 5:43), Paul (Romans 13:9), and James (James 2:8), it can be traced all the way back to Leviticus 19:18. From the earliest days in the Old Testament, we learn that God's people were commanded to demonstrate a love for God **as well as for their neighbors**. Consider the sacrifice that Jesus Christ was willing to make as He gave up His body for all of humanity. John summed up the command well when he wrote: "Beloved, if God so loved us, we ought also to love one another" (1 John 4:11).

As Jesus was trying to convey this message of unconditional love for others, He spoke of caring for the hungry, thirsty, homeless, naked, sick, and imprisoned (Matthew 25:35-46). He went on to clarify: "Verily I say unto you, inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me" (Matthew 25:40). Jesus also used the parable of the Good Samaritan (Luke 10:25-37) to teach that we, as Christians, are to be kind and show love toward everyone. The Samaritan neighbor bandaged wounds, poured oil, and transported the injured man to a place so that he could recover. Medical history records that anointing with oil, bandaging wounds, and transporting a person to a place where he or she could rest, represented **the very best medical care** available in that day. Given a similar situation today, would we not use the best medical technology available to prolong the life of somone in dire need? And do we not have the technology and ability today to successfully transplant organs? Success rates for properly matched kidney and heart transplants are well into the upper 80% range. If a practice or procedure is not contradictory to biblical principles, then it should be considered permissible, and something that faithful Christians can support.

The Body is a Temple

It also is important to address the issue of mutilation, since some view organ donation as the ultimate form of mutilating the human body. Frequently, passages such as 1 Corinthians 6:19-20 are used to defend the idea that organs should not be harvested from a person's body. As stewards of God's creation, we should treat our bodies with respect, and abstain from whatever is deleterious to them. However, when Paul wrote those words to the Christians at Corinth, he stated: "Therefore glorify God in your body, and in your spirit, which are God's" (v. 20), indicating this was something that was to be carried out while the individual was still living. In the apostle's second letter to the church at Corinth, he reminded them: "For we know that if our earthly house of this tabernacle were dissolved, we have a building of God, an house not made with hands, eternal in the heavens" (5:1).

Others have suggested that passages in which Jesus taught that we should rid our bodies of our hands, feet, or eyes if that part causes us to stumble (cf. Matthew 5:29-30, 18:8-9, and Mark 9:43-48), permit and support organ donation. Understanding these passages in their proper context reveals, however, that Jesus was not advocating self-mutilation or organ donation. He was, in fact, emphasizing the seriousness of permitting sin into one's life, and encouraging extreme measures to prevent sin.

The Resurrection

One of the most prevalent misunderstandings among Christians is the idea that the entire body needs to be present and preserved in some fashion for the resurrection. As such, many Christians are reluctant to donate organs because they believe resurrection requires a "complete" body. Where does this idea leave the countless millions who died more than 50-100 years ago-before vaults were used to help delay the decomposition process? If you were to visit the gravesites of individuals who passed away before the twentieth century, both the body and the casket already would have decomposed. When God was handing out punishments at the Garden of Eden, he told Adam: "In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it was thou taken, for dust thou art, and unto dust shalt thou return" (Genesis 3:19, emp. added). Thus, God avowed that one day, our earthly bodies would return to the soil.

Additionally, we need to possess a proper understanding of what will transpire at the resurrection. Paul, in writing to the Corinthians, provided some insight as to the difference between the physical body at death (which may be disposed of in a variety of ways), and the spiritual body of the resurrection (1 Corinthians 15:35-49). He used the analogy of the difference between a seed and the product of that seed to illustrate the difference between the earthly body and the resurrected body. He then went on to comment: "It is sown a natural body; it is raised a spiritual body. There is a natural body, and there is a spiritual body" (v. 44). If we believe that the bodies to be raised at the resurrection will represent simply a "reoccupation" of our earthly bodies, then we possess a false concept of our resurrection as presented in the Bible. We are told that the earthly body-that of flesh and blood-will not enter into the heavenly inheritance (1 Corinthians 15:50). Revelation 21:13 informs us that the seas will give up the dead that are in them, thereby indicating that even those buried or lost at sea will be accounted for on the Resurrection Day. Based on these facts, Christians should not fear or reject organ donation merely in an attempt to keep the physical body intact for the resurrection.

THE SLIPPERY SLOPE– BRAIN DEATH DEFINED

While the Bible does not speak against organ donation, people who revere God's Word still feel a certain amount of reservation concerning the harvesting of organs—and for good reason. There is nothing ethically wrong in recovering organs from the dead, but most successful organ transplants require that any prospective organs be kept alive with blood and oxygen flowing through them until they are removed from the body. This quandary is indeed problematic, for we cannot, and must not, support the termination of life in favor of organ donation.

In the late 1960s, the Uniform Anatomical Gift Act was passed into law in every state in this country. This piece of legislation allows individuals, while still living, to authorize the donation of any portions of their body after death. If the deceased person has not authorized such donation, but also has not specifically prohibited it, then family members are permitted to give authorization. Around this same time (in 1968), an *ad hoc* committee at Harvard recommended a neurological criterion–cessation of brain activity–as the determining factor of death. Prior to this, the medical profession used cessation of heart and lung activity–i.e., a cardiopulmonary criterion–to mark the point of death. But medical technology had progressed to a point in which it was possible to sustain (via a respirator) heart and lung activity for days or even weeks after a patient had irreversibly lost all brain function.

The Harvard committee simply wanted to establish a criterion-brain death-that physicians could use to determine death. Their original criteria-which included lack of responsiveness, no breathing or movement (when removed from a respirator), no reflexes, and a flat EEG (electroencephalogram) -were intended to determine when **all** brain activity had ended and thus when "whole-brain" death had occurred. This criterion was largely accepted, and subsequently was written into law. However, a person can suffer the loss of "higher" (cortical) brain function (thereby losing the capacity for awareness of self-consciousness) while still possessing brain-stem functions (such as spontaneous breathing, eye opening, etc.). According to the original Harvard criteria, this loss of higher functions alone **did not** constitute death, since it was not total brain death. Thus, we were to think of death as the irreversible and complete loss of heart, lung, and brain function.

But in 1972, cyclosporine, the first powerful immunosuppressive drug, was discovered, which made it possible for patients to receive (and prosper after receiving) organs that were not exact matches. If the immune system's rejection of potential donor organs could be overcome, the possibilities seemed endless. Therefore, in an effort to increase the supply of donated organs, many medical professionals began to call for an "update" in the criteria for determining death.

It has become increasingly clear in recent years that the thirst for transplantable organs is so strong that we are, in fact, redefining death in order to produce and procure the "needed" organs. In 1994, the Council on Ethical and Judicial Affairs of the American Medical Association (AMA) issued its updated opinion that it is "ethically permissible" to use "the anencephalic neonate" as an organ donor (see Council on Ethical and Judicial Affairs). This decision came in spite of current law, which recognizes an encephalic babies as living. (An encephaly is a condition in which an infant is born with a fully functioning brain stem but without any cerebral hemispheres. Thus it is unlikely that the baby is aware of his or her own existence or surroundings; the child usually dies from complications within hours, or a few days, of delivery.) The baby is "brain alive," but artificially designated as brain dead. Interestingly, the AMA's decision contradicts the opinion of the members of the American Academy of Pediatrics, who had reviewed this issue just two years earlier (see American Academy..., 1992).

How many more laws and definitions will be changed in the future as the **demand** for usable organs continues to outnumber the **supply**. As science descends down the slippery slope, we must remain vigilant in supporting organ donation only in those cases in which certain death has been determined by every possible criterion-including **complete** loss of brain function-rather than just by one or two "selective" criteria. God forbids the intentional killing of the innocent (James 2: 10-11); thus, we must cautiously and carefully determine, in light of the teachings within God's Word, whether a respirator is simply oxygenating a corpse, or sustaining a living human being. Then we must act accordingly. But we must not rely solely on the scientific community to make ethical decisions, since, as ethicist Paul Ramsey once noted, patients often no longer are viewed as people, but as "a useful precadaver" (1970, p. 208).

ORGANS FOR SALE

The bidding for a human kidney offered on the Internet auction site eBay hit \$5.7 million before the company put a stop to it (see AP Report, 1999). Internet bargain hunters drove up the price of one human kidney-advertised for sale on August 26, 1999, for \$25,000-to \$5.7 million before the on-line auctioneer put a stop to the macabre offer. The second kidney, posted the following Thursday afternoon with an asking price of \$4 million, did not receive any bids before it was pulled. But why would individuals bid such exorbitant amounts for a kidney? The answer is found in the old economic principle of supply and demand. As of July 15, 2003, there were 82,222 individuals in the United States waiting for an organ transplant. However, only 24,076 transplants were performed in 2001 (see UNOS Information). As a result, one of the most important ethical questions involved in organ transplantation is: "Who gets the organ?" Should we do as the Chinese, and harvest organs from condemned prisoners? Or should we pass laws that remove organ donation from the status of an act of altruism, and place it instead into the realm of regulated policy?

The other alternative is to offer incentives for organ donation. On May 3, 1999, CNN reported a first-of-its-kind pilot program in Pennsylvania that paid organ donors \$300 towards their final funeral expenses (see Kahn, 1999). Some people see no difference in the selling of organs and the selling of blood, plasma, eggs, or semen. Proposals to pay for organs are not new, and many countries actively participate in the trade of organs for money. But the United States has enacted federal laws that strictly prohibit the trade or sale of organs. Consider what changes might occur if payment for organs were permitted: (1) it could exploit people who need money, but who normally would not donate; (2) it could motivate families to decide to discontinue treatment sooner; and (3) it would provide the rich an unfair advantage in obtaining organs.

Are Xenografts the Answer?

This lack of viable donor organs has led researchers to find alternative methods. Artificial organs (such as the Jarvic 7 or AbioCor artificial hearts) leave the patient with what can only be called a "dismal" prognosis; thus, researchers have been investigating the possibility of cross-species transplants (referred to as xenografts). Xenotransplantation has long been considered an answer to the critical shortage of available human donor organs. As patient waiting lists have become longer, the inadequate supply of donor organs has become critical. Nationwide, at least one patient dies each day while waiting for a liver transplant—a figure that increases with each passing year.

Although early attempts at xenotransplantation date back as far as 1905, better understanding of the immune system, and subsequent new drugs, created a scientific climate favorable for several attempts in the 1960s and 1970s. In 1963 and 1964, physician Keith Reemtsma performed chimpanzee-tohuman kidney transplants in twelve adults at Tulane University. The only real "success" story was one recipient who lived with the chimp kidney for nine months without evidence of rejection before dying of an infection. As word of this "success" leaked out, surgeons made additional unsuccessful attempts to transplant hearts and kidneys from chimpanzee into humans. Thomas Starzl even performed kidney transplants in six adults using baboon donors. The patients lived for 19 to 98 days after their transplants. The most famous xenotransplant occurred on October 26, 1984, in a tiny infant known simply as Baby Fae (the child's middle name, which was used to protect the family's privacy). In just three weeks, the little girl was recognized and loved by more people than practically any infant in history. Hearts broke as she was shown listening to her mother's voice over the telephone. With the transplanted heart of a baboon, she made medical history as the first newborn

recipient of a cross-species heart transplant. Sadly, however, just twenty short days later, Baby Fae died—most likely due to the blood-type incompatibility that existed between the donor baboon heart and the small infant.

Between 1963 and 1984, twenty-eight clinical procedures involving solid organs from animal donors were performed in the United States and South Africa. However the results were less than optimal. The differences in outward appearances between animal organs and human organs are the least of the concerns. Animals have different blood types, antigens, and proteins that are recognized as foreign in humans. Those that have shown any glimmer of success have done so as the result of immunosuppressive drugs—putting the patients at greater risks for sickness and tumors in the future. Patients who accept donor organs from animals face a lifetime of expensive medication in order to stave off rejection.

So what is the solution? There is indeed a critical need for donors. But since xenografts have shown very little promise, the only viable alternative appears to be increasing the available supply of donor organs. The key is education.

CONCLUSION

Can Christians support organ donation and transplantation? Yes. It is an incredibly impressive act of compassion and love for others. Even living donations (such as donating a kidney) are acceptable. However, we must remain alert that we do not allow **living** individuals on respirators to become donors. We cannot justify having a bed-ridden patient turned to prevent bedsores, or having their lungs suctioned in order to prevent pneumonia, and then turn around and treat that living body as "dead" simply to harvest the organs needed to keep someone else alive. Simultaneously, since most transplants come from donors who have been declared neurologically dead, it is important that we fully understand the criteria the medical profession is using to define brain death. Only when a patient is determined to **be irreversibly and completely** brain dead should he or she be considered a candidate for organ donation. We need to understand that science will continue to press forward with what is known as the "technological imperative"— "if it **can** be done, then it **must** be done." As Christians, we need to balance our lives, and occasionally be prepared to say no to any medical advances that are ethically questionable. We need to demonstrate to the world that while we appreciate medical advances, they do not dictate in the realm of morals and/or ethics.



Chapter 9

Conclusion

Exactly what is living and nonliving? A study reported from researchers at Queen's University revealed that human fetuses have the ability to recognize their mother's voice in utero (see "Fetal Heart...," 2003). This study demonstrated that the fetus not only could recognize its mother's voice, but also could distinguish it from other female voices. Scientists played a twominute-long audiotape of thirty fetuses' own mothers reading a poem to the fetuses. They then played another two-minutelong audiotape of another female voice reading a poem. The unborn babies responded to their own mother's voice with an obvious, measurable increase in heart rate, but when the stranger's voice was played, the heart rates of the infants decelerated. This confirms what scientists have suspected for more than twenty years-that experiences in the womb help shape preferences and behavior of the child who will become the newborn.

Dr. Barbara Kisilevsky, a Queen's University professor, believes this research indicates that a fetus in the womb can exhibit "preference/recognition" before birth. This would suggest that fetuses are capable of learning in the womb, and can remember and distinguish several different voices. **How does our federal government continue to designate these babies as "not living tissue" when, in fact, we have evidence that they can learn**? As Christians, we must carefully analyze all new medical technologies with the fact that life begins at conception, and does not end until the soul returns to God (Ecclesiastes 12:7).

WHAT IS THE VALUE OF HUMAN LIFE?

As society continues to devalue human life, one may wonder what is the real "value" of a human life. One way to calculate the worth of humans is to look at what employer's payout as a result of a workplace accident or illness. Examination of Occupational Safety and Health Administration (OSHA) enforcement records of inspections that were completed during the period January 1, 1988, through October 21, 1994, indicated there were 5,929 fatality investigations where one or more willful, repeat, or serious violations were issued (see OSHA data). These companies were required to pay penalties in the amount of \$25,244,430.88. The total number of victims was 6,162. This corresponded to an average penalty per victim of \$4,096.79. It is an interesting statistic to observe that, assuming the average man weighs 175 pounds, the value of human life according to OSHA is roughly equal to \$23 per pound-about the price of cheap Russian caviar. Of course, this value is much higher than the value placed on human life in other countries. It is no wonder, then, that we have people like physician Jack Kevorkian roaming the country, willing to extinguish life for just a few hundred dollars. Nicknamed "Dr. Death," Kevorkian estimated the number of people that he has helped in the suicide to be around 130 since 1990 (see Kevorkian, 2001).

This total lack of disregard for human life likely plays a major role in why we have young people growing up today who have no future plans and who see no value to their existence. Children around our country watch as we kill our young and our elderly, and then listen to news reports that describe how gunfire was exchanged over a pair of tennis shoes. These individuals observe other teens and adults waste their lives on alcohol and drugs. Add to that the fact that these young people have been inundated with evolutionary theory—which teaches that humans evolved from an ape-like ancestor—and one can understand why they place so little value on human life. The ice-cold words of the late philosopher Joseph Fletcher attest to this radical line of thinking. In discussing the human worth of the mentally ill and individuals born with birth defects, Fletcher remarked:

Idiots are not, never were, and never will be in any degree responsible [because they cannot understand consequences of action]. Idiots, that is to say, are not human. The problem they pose is not lack of sufficient mind, but of any mind at all. No matter how euphoric their behavior might be, they are outside the pale of human integrity. Indeed, sustained and "plateau" euphoria is itself prima facie clinical evidence of mindlessness (1975, p. 20, bracketed item in orig.).

We need to reaffirm to society that God does exist! Ever since the last shells exploded from World War II, children have been receiving a steady diet of evolution and humanism in public schools. Many junior high classrooms still have a poster spread across the top of the chalkboard with an apelike creature at one end and a human at the other—and everything in between. People like the late Stephen Jay Gould have taught millions of people that

the human species has inhabited this planet for only 250,000 years or so-roughly .0015 percent of the history of life, the last inch of the cosmic mile. The world fared perfectly well without us for all but this last moment of earthly time-and this fact makes our appearance look more like an accidental after-thought than the culmination of a prefigured plan (as quoted in Zacharias, 1994, p. 55).

Why believe in a God, if we are nothing more than just an "accidental afterthought"? Robert Reily said:

The problem is that, by denying the possibility of a relationship between God and man, atheism also denies the possibility of a just relationship between men.

...Human life is sacred only if there is a God to sanctify it. Otherwise man is just another collection of atoms and can be treated as such (1988, p. 15).

Human beings are more than just a collection of atoms! It is time for us to re-establish the foundation that there is a God and that the Bible is His inspired Word.

Life–contradictory claims by eminent scientists and Supreme Court Justices notwithstanding–begins **at conception**, **and continues until the soul returns to God Who gave it.** When the gametes join to form the zygote that will grow into the fetus, and when the full complement of chromosomes necessary to produce and support life combines, it is at that moment that the formation of a new body begins. It is the result of a **viable** male gamete joined sexually with a **viable** female gamete, which has resulted in the formation of a zygote containing the standard human chromosome number–46. The embryo is growing, and is alive. It is not just "potentially" human; it **is** human!

The next time you find yourself contemplating the value of human life, remember: "In the beginning God created the heaven and the earth" (Genesis 1:1). Every single child growing up today needs to have these words reinforced in his or her mind so that he or she will know that personal existence is not just happenstance.

And God said, "Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the foul of the air, and over the cattle, and over all the earth, and every creeping thing that creepth upon the Earth." So God created man in his own image, in the image of God created he him; male and female he created them (Genesis 1:26-27).

Think for just a moment about the changes in attitudes we would witness in our young people if they grew up with **those** words scrolled across the top of classroom chalkboards every single school day. "And the Lord God formed man of the dust

of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (Genesis 2:7) These words were delivered to us by the inspired writers God's Word. The Bible is not just some "nice history book" from which we can learn interesting lessons. As humans, we must recognize that life is a gift from God–Who is the Giver of life (Acts 17:28). We also must realize that by devaluing human life, we also are reducing the value of God sending His only begotten Son. The famous verse that numerous children learn before they ever enter school says: "For God so loved the world, that he gave his only begotten Son, that whoever believes in him should not perish, but have everlasting life" (John 3:16). If human life has little or no value, then what does that say about the gift of Christ? Why did Christ suffer and die on the cruel cross of Calvary? What is the value of a human life? Considering Who the Giver of life is, the value of that gift is immeasurable!

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