Abstract
Religion and spirituality are differentiated. Various perspectives on pain are considered: pain and suffering have purposes according to fundamentalist interpretation of scripture and pain may be transformed by near-death and deathbed experiences. Spiritual means to deal with pain are suggested, and hypotheses to explain how spirituality can relieve pain are suggested.

Religion, spirituality and pain
Religion is a tradition-borne and faith-based organized system of beliefs, symbols, rituals, attitudes, standards, and practices. With monotheistic religions, such as Judaism, Christianity, and Islam, the belief system is based on an omnipotent, omniscient, omnipresent, all-knowing God, who has varying degrees of control in the believers’ lives.

Spirituality is also faith-based, but it can be attained without the involvement of organized religion. Using prayer, meditation or a trance, a person tries to understand life and its meaning and to connect with God, a higher power, a universal consciousness or nature. A spiritual individual is a moral, kind, caring person who respects others, animals and nature.

Some persons who are highly religious are not spiritual, even though they follow precepts of their religion while in church, synagogue or mosque. Once outside of the house of worship, they may conduct fraudulent deals or commit criminal acts (Morse, 2001).

Pain and suffering have purposes within fundamentalist Christian interpretation of scripture
1. They alert individuals to potentially destructive problems — physical, emotional, and spiritual (2 Cor. 7:8-13). People grow through pain, which makes them strong. Individuals improve their moral fiber when they can cope. If they didn’t have pain and suffering, they would never have their strength of character tested. Through pain — be it physical, emotional or spiritual — people find their true strength, because pain pushes them to the limits. In facing pain, individuals face fear and self-doubt. They can even face despair. These are the fires that temper individuals’ inner steel, giving them confidence that, in the face of future pain, they will be capable of surviving. This knowledge, in turn, gives them a greater sense of self-esteem (Patterson).
2. They restrain people and prevent them from committing evil (Hebrews 12:5-13).

3. They humble individuals, reminding them of their weakness (2 Corinthians 12:7-10).

4. They teach people about themselves, their values and their choices (Matthew 13:20-23).

5. They teach persons about God and Christ. They need to have pain and suffering to learn the fear of God because fear of God is the beginning of wisdom. The magnitude of Christ’s love for humans was revealed in His willingness to suffer and die in their place (relative to Jesus: Hebrews 12:2).

6. People’s brief life span and pain and suffering bring spiritual protection. Long life spans promote the wicked, not the righteous (Genesis 6:3-8). Absence of pain and suffering promotes the wicked, not the righteous (Genesis 3:16-19).

7. Because Satan is the most powerful created being, and because the circumstances in which he tempts humans are the most severe, there exists no possibility of people facing any greater tests than the ones they undergo in their brief physical life on Earth (Isaiah 14:11-17, Ezekiel 28:12-19, Jude 9). If humans pass this test, choosing God's rescue in Christ, the way is opened for God to deliver them eternally from all sin, death, pain, suffering, and evil without taking away their free-will, and without losing the possibility to love. In order for the rescue to be eternally secure, everyone must be subjected to the ultimate test (Rev. 20:7-10).

8. The test is not too difficult. God will not allow people to be tempted beyond what they can bear (I Corinthians 10:13). God's help and comfort are always available to those who depend upon Him (Matthew 28:20, Hebrews 13:5).

9. Pain and suffering within God's will purifies the soul and communicates to the world the surpassing value of the spiritual over the physical, the eternal over the temporal (Hebrews 12:16, I Peter 2:19-25 and 4:1-2). Skeptics watch Christians' response to pain, suffering and persecution to see: whether or not the faith of such individuals is true, reliable, and secure; and whether or not God is miraculously at work within them (I Peter 3:13-18). The severest, often unacknowledged, test to which doubters subject believers is persecution (Job, Acts 7:55-8:3 and 9:1-19). One of the greatest joys of this life comes through pain and suffering for "righteousness' sake" (Matthew 5:10, I Peter 4:14).

10. Humans’ time of pain and suffering is brief. Their life span is like a whiff of smoke compared to eternity (Job 7:6-10, Psalm 103:15-16, James 4:14). People can barely begin to fathom God's time frame (II Timothy 1:9, 1:2, II Peter 3:8, Revelation 21:1).

11. God first blesses those individuals who have gone astray so that they may acknowledge Him as their source of blessing and then repent (Psalm 73). If people refuse to acknowledge God as the source of their blessing, God removes the blessing and thus prepares them to listen to the message of those who have chosen Him (Proverbs 24:15-20). If the wicked persist in evil, they receive only what they have chosen — eternal torment and separation from God (Psalm 73). So if good persons have pain and suffering on Earth, they will have bliss in Heaven. Christ had to suffer for the ultimate good of humanity. In the next world, for the good individuals, there will be no pain or suffering. The wicked could have less pain and suffering on Earth, but they will have eternal torment in Hell.

12. Adam and Eve ate the forbidden fruit.
13. God is omnipotent but does not act against pain, suffering and evil.

14. People disobey God’s laws (Leviticus 26:14; Deuteronomy 28:15; Psalm 1:6; Exodus 23:21; Jeremiah 7: 5-7, 17:5-8; Malachi 3: 8-11). “A man reaps what he sows” (Galatians 6: 7). For example, God afflicted Miriam with leprosy for challenging the authority of Moses. God took the life of David’s child, born of an adulterous relationship with Bathsheba. However, there is the unusual case of Job, who had extreme pain and suffering although he was a highly moral man.

15. Committed evil in a previous life (reincarnation) may bring about pain in this life. This has been given by some as the reason for Job’s pain and suffering.

16. It could be because of parents’ sins. For example, Jesus disagreed in John 9, when he was asked, “Did the blind man sin or was his parents that had sinned?” Jesus said that it was evil to think in that way.

Pain in other religions
While I have no depth of expertise in other religions, a few salient points come to mind. Pain and suffering are not influenced by God according to certain humanistic religious traditions. They state that God has no direct influence on contemporary human events. When people suffer, all that God can do is to be present with them. The comfort in this belief system comes from the conviction that God feels humans’ pain and knows what they are going through when they suffer. This concept is based in part on Psalm 23: “Thy rod and thy staff they comfort me” (Morse, 2001).

Pain and suffering have purposes according to Hinduism and Buddhism. According to the Law of Karma, all actions of this life are the result of actions of a previous life. So, even if a person has been good in this life, if he/she has a great deal of pain and suffering, it is because of having committed evil acts in a previous life (Morse, 2001).

Personal spiritual experiences and pain

Near-Death Experiences (NDEs) and Pain
With almost every individual that I have examined and every case report that I have read, no matter how intense the pain, as soon as the person has a NDE, the pain stops (Morse, 2000). Then, once the individual is resuscitated, the pain returns. Here are some case reports (Morse, 2001).

NDE of Mark: Orthopedic Surgeon
Mark comes from Fort Lauderdale. As an 18-years old college student he developed pseudomembranous colitis (inflammation of the colon) secondary to antibiotics. He stated: “I practically crawled into the student health department. They were so concerned that they called my parents, who had me fly immediately to Miami. I was admitted to the hospital. A barium enema showed a massive bowel. The gastroenterologist did an emergency sigmoidoscopy in a room in the emergency department, since it was late and the gastrointestinal (GI) suite was closed. All of a sudden I was in excruciating pain. He’d perforated the bowel. I could feel blood running down my thighs. The GI guy was panicking, yelling “Bring more gauze. He’s starting to go!” I was really trying to fight losing consciousness. But the pain was catastrophic. The next thing I remember was being in ER, seeing lots of people buzzing around. I could see myself. But while I was watching all of this, miraculously the pain was gone. I felt positively energetic! Then, suddenly, I was running through a plowed field with mounds, separated about two feet apart from each other. I was
running, feeling wonderful, and in the distance I saw a woman dressed like Sally Field in the Flying Nun. She had on a white blouse, black long sleeved dress, and that European pointed nun hat. She was near a white wooden church with a small steeple, on the left side of me, and on the other side, far back, was like a round opening, like to a tunnel. She was waving me on, but I kept stumbling. I was still trying to run, but I was actually getting farther and farther away from her. Next thing was I woke up in the ICU. Had to have an emergency temporary colostomy” (courtesy of Barbara Rommer, MD).

NDE of Sharon Z
When Sharon was 23 years old, in 1966, she had a NDE. She stated, “I was having a really bad pregnancy, with toxemia, and was supposed to have a C-Section. But 2 or 3 days before my due date would you believe the doctors and nurses went on strike! So an Oriental doctor took over, and he was determined for me to have a regular labor. He had given me the third bottle of Pitocin when I went bad, and they called a Priest. (I wasn't Catholic!) I was in such agony, I can’t even tell you! Suddenly, I lifted out of my body. I had absolutely no pain! I could see my body, and I could hear everything they said. I followed, over myself, all the way to the O. R. When they started cutting, I just popped back in. Just “bing”, and I was back! It’s like diving into a swimming pool, when you hit the water. I have to tell you that when I was out, I had no worry, no pain, and I was totally unconcerned. It was like I was being nosey, watching what was going on. It’s as clear as if it happened yesterday. I think there was something connecting me to my body, but you couldn’t really feel it. It was like a tow rope” (courtesy of Barbara Rommer, MD).

NDE of Sarah
Sarah was on her bicycle when it was hit by a truck. She was in extreme pain, and suddenly she was in a dark tunnel with a brilliant light at the end. She was feeling no pain and intense bliss. Here is her description of coming back into her body. “My next conscious memory was of lying in a hospital bed with uncountable tubes sticking into me and a respirator tube in my mouth. I was full of joy and humming with power although I was unable to move any part of my body of my own volition. I was also full of pain and that sensation quickly oriented me to my physical self again” (from Art Bell Show 2/4/99-2/5/99; http://www.nderf.org/Sarah_nde.htm).

NDE of Linda Stewart
Linda has a chronic debilitating autoimmune disease. This is part of the report on her NDE. “I felt a strong detachment from my physical body and the life I had created. I was no longer connected to a pitiful, suffering mass of flesh. I was not that body and yet I still existed, but in a new state of being. Gone was the wrenching pain that had accompanied my every waking moment. The strain of expanding my lungs to grasp for air had disappeared. Fatigue, which had weighted my life for years, had lifted. Depression no longer drained my mind of hope. Sight and sounds did not sear my head with pain, leaving me emotionally bereft. And yet, I still existed. I felt weightless and calm. Although, I knew I was not in the lifeless body lying on my bed, and the eyes and brain I had previously identified as mine, were in that inanimate object with which I no longer identified, I was still aware of sight and thoughts and sensations. I observed my new reality with tranquility...” (http://www.near-death.com/stewart.html).

NDE of Virginia Rivers
Virginia had severe pneumonia with high fever, intense painful pressure in her ears and difficulty breathing. Here is part of her NDE. “There was total peace. I was surrounded on all sides by a black void. I was no longer frightened. I was comfortable and content to be where I was. No fear...no pain... just peace and comfort and amazingly undaunted curiosity” (http://www.near-death.com/rivers.html).
NDE of George Radonaia, MD, Ph.D., Neuropathologist
George was involved in an apparently fatal car accident. He was pronounced dead. George awakened in the morgue as they were beginning to cut into his body for an autopsy. “The first thing I remember about my near-death experience is that I discovered myself in a realm of total darkness. I had no physical pain....As they began to cut into my stomach, I felt as though some great power took hold of my neck and pushed me down. And it was so powerful that I opened my eyes and had this huge sense of pain.....” (http://www.near-death.com/radonaia.html).

Hellish NDEs
Hellish NDEs are those which are decidedly unpleasant as contrasted to the usual blissful experiences. Hellish NDEs include descriptions such as; attacks by horrendous beings; being dragged into a pit filled with demon-like creatures; finding oneself in burning, smoke-filled, horribly smelling landscapes; and being in a complete void (absolute nothingness) (Morse, 2001).

Are those people who had hellish NDEs also pain free when in the near-death state or are they in pain or other forms of severe discomfort? Here’s the answer given by Dr. Barbara Rommer, a leading expert on NDEs, from her book, Blessing in Disguise (Rommer, 2000).

“With reference to the frightening NDEs: Even though the experience is frightening, they feel no pain (fear yes, pain no) until returning to their severely traumatized physical body.”

Hypotheses for How the NDE Pain Free State Occurs

1. The NDE is the result of dissociation
The OBE in the NDE is similar to what happens under deep hypnosis when a person can take the existing pain — for example, in the back — and guide it outside of the body. The pain is out there but no longer felt. In essence, the pain has been dissociated from the body.

I do not agree with this explanation because for dissociation to be effective, from my experience of using hypnosis for over 30 years, discussions with many medical hypnotists, and review of relevant literature, a person generally has to be hypnotized repeatedly until he/she can develop the ability to perform this act, as in the following. “New Orleans burn specialist Dabney Ewin uses the same techniques to heal burn victims. He induces a trance in the patient and helps them control their pain by directing them through guided imagery. Ewin teaches patients to dissociate, to unhook their mind from their body, which seems to be an essential element in the healing process, and to “go to a cave by the ocean, where they feel relaxed, pleasant, free of responsibility” or to go to a “laughing place.”

Numerous controlled clinical studies have shown that hypnosis can be useful in controlling injuries from burns(Morse, 2001, 2000). Hypnosis is felt by some to be a state of dissociation, says Stanford University psychiatrist David Spiegel. As such, it is similar to an NDE and perhaps mediated by the same biological structures”(Morse and Perry, 2000).

From my experience, severe trauma or shock can sometimes cause immediate hypnosis. However, I have found no evidence that hypnosis is a pain-free state, unless it is a prolonged trance during which endorphins might be released. (See section 2.)

With Multiple Personality Disorder, it might be possible for an individual to be in severe pain in one personality and pain free in another. However, I haven’t read about such cases. If they do occur, I would be inclined to believe that once the pain amelioration occurred, it would last through the other personality state, especially if it was related to the release of endorphins. (See section 2.)
2. The NDE is related to the release of endorphins, the body's natural pain reducing mechanism

Under extreme stress or as the result of an injury or excitement, the body can produce endorphins that block out the pain. However the effect presumably lasts for a certain period of time and would wear off gradually. With a NDE, as soon as the individual returns to the body, the pain immediately comes back in full intensity. The great bliss, which some scientists also have attributed to the release of endorphins, is also gone once the person returns to the body. In some cases a NDE only lasts for a few minutes or less. Yet, as soon as they are back in the body, the pain returns. In other instances with a NDE, when a person is in serious pain, it cannot be relieved simply by deep meditation (although that can help a little) or by trying to go to sleep.

3. The NDE is the result of the soul temporarily leaving the body to get a glimpse of the afterlife

The pain relief is absolute, and the blissful feelings are indescribable. However, once the soul returns to the body, the body’s sensations now take over.

This possibility has been partially supported by further evidence from deathbed experiences. Even when they are in severe pain, suddenly these dying people report feeling pain free and blissful and die smiling. (Deathbed experiences are discussed further following the NDE section.)

I support this third explanation.

Views of experts on NDEs

Dr. Barbara Rommer, a world-renowned authority on NDEs:

With reference to the pain free state (while out of body) being related to endorphins, I think not. Jansen reported in a study (I think in the Journal of Near-Death Studies) that an injection of Beta Endorphin into the cerebro-spinal fluid caused an analgesic effect which lasted well over 22 hours. That just doesn't match the length of time for an NDE. If the endorphin theory was valid, then once the person was ‘back in the body’ (within usually minutes, in Earth time) they would still be pain free since the endorphin analgesia lasts very long. Yet, the person immediately is back to feeling pain when in the physical.

I truly believe that the OBE state is suggestive of the person’s consciousness separating from the physical (and often they are aware of being ‘in’ their astral body). I do believe that our astral, or energy, body is always ‘perfect.’ I do believe that when a person has an amputation of a leg, but is ‘whole’ in an NDE, it is because their physical body (in the ER, OR, etc.) may be less than whole, but their astral body is whole and perfect (Rommer, 2000).

Dr. PMH Atwater, another world-renowned authority on NDEs:

“There is no question in my mind, based on my experience researching near-death states, that dissociation is a common component of the phenomenon once the experience is in process and afterwards. The stress link is present in almost every case, which I discuss at length in The Complete Idiot’s Guide to Near-Death Experiences. But there is nothing to suggest that dissociation accounts for the individual being pain free during their episode. The only valid theory concerning pain would entail the individual
actually leaving the body shell for however long, then returning, and once again responding to body sensations. While out-of-body, normal body sensations cease. I have yet to hear of a case where this was not true. Bear in mind, though, that very often the out-of-body component to near-death states is more intensely experienced than regular or run-of-the-mill OBE episodes" (Atwater, 1999).

Deathbed Experiences and Pain
Seneca of ancient Rome, as he lay dying, said, “Who is there in all the world who listens to us? Here I am, this is me in my nakedness, with my wounds, my secret grief, my despair, my betrayal, my pain which I can’t express, my terror, my abandonment. Oh, listen to me for a day, an hour, a moment, lest I expire in my terrible wilderness, my lonely silence. Oh, God, is there no one to listen?”

Spiritual pain
According to Trudy Weathersby, spiritual pain has the following components: 1) constant and chronic physical pain; 2) insomnia; 3) isolation or withdrawal; 4) conflict with others; 5) fear, anxiety, and mistrust of others; 6) anger; 7) depression; 8) guilt, and low self worth; 9) hopelessness; 10) feeling of failure with life; 11) unforgiveness; 12) despair; and 13) dread.

It has been found that prayer, meditation, self-hypnosis, music, viewing aesthetic beauty such as paintings and sculpture, can help people die easily.

Studies with terminally ill patients — patients who are facing imminent death and who are often in a great deal of pain, have shown that they have high levels of spiritual well-being. However, those who had the greatest sense of spiritual well-being were also experiencing greater physical well-being, which means they had less pain (Matthews and Clark, 1998).

Examination of patients at the point of death by physicians, nurses, family members and friends have revealed that if they are conscious, the patients frequently report images and feelings similar to those of NDEs. This includes absence of pain even when they were in intense pain previously (Wills-Brandon, 2000). This brings up the question of whether or not physicians should do everything possible to prolong life when a dying patient is in extreme pain. Should the physicians let the dying patients go to the great beyond where they are apparently pain free and in bliss? Interestingly, in Orthodox Judaism, it is considered that when an individual dies, the “nefesh” (soul) suffers “the pangs of the grave” as it separates from the physical body. This is supposedly a painful process. However, it is believed if the person was righteous and had treated his/her body with respect and had no addictions, then he/she might suffer little, if at all. It was stated: “A righteous individual would have his soul depart similarly to drawing hair out of milk, while an evil person would have his soul depart similarly to pulling a tangled rope out of a narrow opening”. (Morse, 2000).

Spiritual means to deal with pain
Anonymous; Back Pain-1

...just two months ago, when I developed persistent severe pain in my mid to upper back, which at times caused nausea. After three weeks of no relief with professional help, I became ill during a Sunday morning church service, and called upon an elder to pray for me. In a few minutes, I was reminded of a year-long problem in our family, which had caused resentment, anger, and emotional stress, taking its toll on my body and resulting
in spiritual confusion. Following prayer by my friend, God’s obedient servant, the pain was gone, in body and mind. I have been pain free since.  
(http://divine-healing.com/testimonies/div.htm)

La Verna Armistead, Coronado, CA; Back Pain-2

Working at San Diego State University requires a certain amount of walking on my part. Therefore, having a pinched nerve in my back, leaving my left leg without the usual lift in my step, was causing a great deal of pain, discomfort, and inconvenience. Over a period of several months, and many trips to doctors, including the usual physical therapy, my medical condition did not change. For a whole week, my husband did all of work at home while I lay on our couch, propped up by pillows in a supposedly therapeutic pose, bringing no improvement whatsoever. Oh, yes, I could move about, but the pain didn’t let up for a moment. One weekend my husband, Jerry, took me on a short walk to show me our neighbor’s garden and their fuchsias called ‘Dancing Ladies’ that were in full bloom. We knew our neighbors, Hal and Ginnie Weeks, through the church. While we were admiring their flowers, the Weeks’ visited with us through their window and invited us inside to pray for my painful condition. Hal invoked the Spirit of our Living God, in the name of Jesus Christ, to enter my body and heal me of pain. Within minutes my miracle took place, the pain never to return. My healing was approximately five years ago...  
(http://divine-healing.com/testimonies/laverna.htm).

Mike; Rheumatoid Arthritis

Mike, a 65-year-old man with rheumatoid arthritis since his 20s, has suffered a great deal of pain throughout the years. He has taken many medications and treatments, courses of physical therapy, and surgical procedures during that time with only minimal success. He used a cane and had severe pain in his hands. He then received many hours of prayer and laying on of hands. “Look, no cane today!” he said. “I couldn’t have walked without it yesterday of the day before. I had come to rely on the cane, especially since I’ve been out of remission. My feet are in good shape today. I’m able to walk a pretty good distance, and I couldn’t have done this a night or two ago.” Mike also noticed improved flexibility and decreased pain in his hands. He said, “I was preoccupied with the pain in my hands. Lynn (a member of the healing prayer team) prayed with me and held my hands, and I had a warming sensation, almost like energy vibrating down my hands, and my hands don’t hurt nearly so bad.” Now that Mike is relieved of the pain and disability from the rheumatoid arthritis, he is leading an active and full life. Ten months after the first healing prayer sessions, Mike is pain free able to go without any medication for his arthritis”  
(Matthews and Clark, 1998).

Hypotheses of How Spirituality Can Control Pain

1. **Meditation**
As a result of meditation with a either a religious word, phrase or prayer, a person gets into a deep relaxed state. Benson showed that 80% of the individuals he interviewed used a religious word, phrase or prayer to induce the relaxation response (Benson, 1975). I have performed studies using meditation to induce hypnosis and perform endodontic (root canal) therapy on vital teeth without any anesthetic. Usually doing endodontic therapy on vital teeth is an extremely painful procedure.
Yoga and Zen practitioners have been able to walk on hot, burning coals without showing signs of pain. This, I believe, is because they are in a deep state of meditation.

**2. Hypnosis**
Closely related to meditation is hypnosis. As mentioned under NDEs, dissociation can be a means of blocking out pain. An individual is usually put into a hypnotic state by a hypnotist. However, once self-hypnosis is learned, the person can block out the pain without needing the help of a hypnotist. I have had patients who got themselves into a hypnotic trance and were able to have endodontic therapy on vital teeth with hypnosis as the only anesthesia, and they showed no sign of pain. Some of these people were deeply religious and got themselves into deep hypnosis by praying or “connecting to God.” I have seen certain charismatic religious ceremonies where individuals have been bitten by snakes or suffered other painful occurrences without showing manifestations of pain. These occurrences can be related to dissociation.

**3. Endorphins**
Another possibility is that under deep hypnosis, endorphins are released. As mentioned in the NDE section, these natural chemicals can block pain.

**4. Biological energy transfer**
Another concept is the one that was originated by Anton Mesmer, the founder of hypnosis (then known as mesmerism). He considered that it was a transfer of energy that resulted in the healing and blocking of pain (Morse and Furst, 1979). The transfer usually comes about by touching of the afflicted individual. Therapeutic Touch, Healing Touch, Reiki, Qigong therapies are non-religious forms of this technique. Most modern concepts about how spiritual healing and pain amelioration occur are based on connecting with this energy source and transferring it to the patient.

Many names have been given to this invisible energy such as chi and aura. Qi Gong is an ancient Chinese method for healing. It involves a Qi master standing next to a patient while transferring healing energy to the patient. Reiki is an ancient Japanese method of healing. With these forms of energy transfer, the practitioner transfers good energy to the patient. This energy is found somewhere in space (a unified field of energy) or, as some believe, either in another dimension, or from God, Jesus Christ or the Holy Spirit. One spiritual healer said, “Energy healing is a transmission of spiritual energy from a higher source to you. In a trance-like meditation, I am able to feel and direct this higher form of energy to any being” (Morse, 2001). Christian spiritual healing is based on anointing with oil and laying on of hands. “Is any sick among you? Let him call for the elders of the church; and let them pray over him, anointing him with oil in the name of the Lord” (James 5:14).

**A Study on Prayer and Pain**
Investigating a “new frontier” in medicine, a recent study in the journal "Family Medicine" discovered a link between patients’ spirituality and better overall health, but not necessarily less pain (McBride et al., 1998). In a random survey of more than 440 patients at a suburban family medicine clinic, investigators found that people with either a high or moderately-high internally motivated relationship with God were much more likely to experience better health. The patients filled out a questionnaire developed at Dartmouth to examine health and level of physical pain. They also responded to a questionnaire to assess “intrinsic” spirituality — a personal connection with God or a Higher Power that gives life meaning and guides life choices. The researchers stated that this contrasts with an "extrinsic" measure such as merely believing in God or having membership in a church, synagogue or mosque, which might or might not affect one’s internal motivations. The results showed that “Differences in health
were the largest between patients having a low level of spirituality and those with either moderate or high levels." This outcome confirmed previous research that showed spiritual commitment could enhance prevention, coping and recovery from illness and surgery. Degrees of spirituality were based on time spent in religious worship and spiritual acts such as meditation.

An unexpected result was with physical pain. Moderately-spiritual patients experienced the least pain; highly spiritual persons more pain; and the low-spirituality group the most pain. The investigators stated, "Spirituality may exert some influence over health, but health is also likely to influence patients' spiritual experiences, making relationships more difficult to untangle." For example, at times more pain may increase spiritual practices. They related that to a study of pregnant women in which it was found that those with poorer health prayed more often (Levin et al. 1993). This may have been a means of coping with their heightened health concerns.

With reference to their own study, the Family Medicine study researchers stated, "This preliminary study is important because it reveals the existence of significant differences in patients' health and pain for those with high, moderate, and low levels of internalized spirituality." They added, "In light of the desire that patients have for physicians to inquire about spirituality, and the present research results, family physicians may want to be aware of and listen for patients' intrinsic spiritual experiences." The researchers suggested that while taking a social history, physicians could also take a spiritual history. Physicians could ask such questions as, "What aspects of religion/spirituality would you like me to keep in mind as I care for you?" and "How has your religious or spiritual history been helpful in coping with your illness?" The investigators concluded, "Family physicians may find that considering the spirituality of their patients informs, enhances, and adds a new dimension to clinical practice."

Conclusions
After examining the various aspects of spirituality and pain, it is obvious that, without drugs, people can control, to a certain degree, their pain and responses to pain. What is not obvious is how they do it. Is it only via the control of their Autonomic Nervous System responses (e.g., endorphins, the immune system) or is it because of the intervention of an external energy source or Supreme Being? Perhaps it is a combination of the all of these
References and Notes


Richard B. Patterson — a clinical psychologist in El Paso, Texas and author of three books on psychology and spirituality — is an authority on this subject.


**Donald Morse, DDS, PhD** is Professor Emeritus from Temple University with degrees in dentistry, endodontics, microbiology, clinical psychology and clinical nutrition. He has been the principal investigator in studies involving hypnosis, meditation, acupuncture and brain wave synchronizers and wrote over 200 scientific articles and 15 books, 8 of which are on stress and its management. His latest book is *Searching for Eternity: A Scientist’s Spiritual Journey to Overcome Death Anxiety*. Dr. Morse was President of the Philadelphia Society for Clinical Hypnosis for two years and Editor-in-Chief of *The International Journal of Psychosomatics* for 10 years. He is presently Editor-in-Chief of *The Journal of Religion and Psychical Research* and President of *The Academy of Religion and Psychical Research*. Dr. Morse has lectured throughout the US and in 30 other countries on hypnosis, meditation, BWS, stress and pain management and dealing with death anxiety. He is currently available to give presentations. (dentpsych@aol.com)