

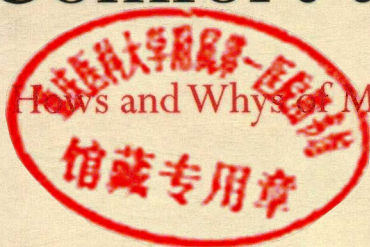
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Heal the Pain, Comfort the Spirit

The Hows and Whys of Modern Pain Treatment



Dorene O'Hara, M.D.

HEAL THE PAIN, COMFORT THE SPIRIT



*The Hows and Whys
of Modern Pain Treatment*

DORENE O'HARA, M.D.

PENN

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Heal the Pain, Comfort the Spirit



For David, Diana, and Chrissy



"The end of our foundation is the knowledge of causes, and the secret motion of things, and the enlarging of the bounds of human empire for the effecting of all things possible."

— Francis Bacon, *The New Atlantis*:
Inscription over the door of the House of Solomon

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Introduction: The Problem



YOU FIRST BEGIN to notice the pain when you're at work. It nags and gnaws at you, interfering with your concentration. You try to ignore it, but you can't. Part of your body—maybe your head, your back, or your knee hurts as if you've been stabbed with a knife. Your mind chatters a thousand questions. Where did this pain come from? Why does it hurt so much? Is it serious?

At last you can no longer ignore it. You see your doctor and are reassured. It's not serious. Like millions of other people, you have a minor pain problem. You get a prescription for a pain reliever, plus a sedative for anxiety, and that helps at first.

You're not sleeping well, though. You can't turn off your thoughts at night, and you toss and turn, waking up every few hours. In the morning you're still tired, so you use caffeine and more pain pills to make it through the day.

The pain hurts so much that you stop exercising. You watch more television, and your spouse is irritated with you. You're irritated with yourself, and you don't know why. The doctor told you nothing was wrong. So this must all be in your head. You tell yourself if you ignore it, the pain will go away. But it doesn't. It goes on. For months. Now the pain bothers you all the time.

Your mood alternates between anger and sadness. You ask, "Why me?" You think you're beyond help. The pain has taken over your life.

This series of events is typically what happens when major or minor acute pain, aggravated by physical and emotional stresses, develops into chronic pain. Millions of people suffer from pain. Pain complaints account for more than 70 million doctor's office visits per year in the United States alone.¹ About 10 percent of all adults in the United States suffer from moderate to severe chronic pain. The most common pain complaints are low back pain and

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headache.² For example, more than 11 million Americans feel a significant impairment from low back pain.³ It has been estimated that headache complaints are responsible for about 150 million lost days of work per year in the United States.⁴ For all pain complaints, the number of lost workdays is at least 550 million per year.⁵

As we age, the percentage of the population reporting pain problems dramatically increases, to at least 20 percent of people over 55.⁶ With some diseases, such as advanced cancer, 75 percent of patients report moderate to severe pain.

Lost workdays due to pain problems cost at least \$100 billion in the United States each year.⁷ Yet according to one managed-care survey, patients' satisfaction with treatment of pain problems plateaus at around 30 percent "perceived adequacy of care."⁸

Worldwide, pain and suffering are among the most common complaints of patients seeking medical attention in clinics. Almost always, the pain is associated with problems affecting ability to work as well as significant psychological distress.⁹ Generally, women report more problems with pain than men, and there are gender differences in how pain is perceived and described beginning in childhood.¹⁰ Various physiological, psychological, and cultural factors help explain these differences, some of which may in fact make it easier for women to modulate their pain internally as compared with men.¹¹ It is also often observed that ethnic factors affect complaints of and responses to pain across different cultures.¹²

In hospitals up to 75 percent of postsurgical patients experience severe pain.¹³ Yet specialized hospital pain services are available to handle postoperative pain relief for only about 15 to 20 percent of surgical patients.¹⁴

Pain is frightening and mysterious to most, but it doesn't have to be. This book discusses what pain *really* is, and what happens to our bodies and minds when we encounter pain. It will describe the experience of pain, the biology (both mind and body) of painful injury, and how standard medical and physical therapies work. The title of this book was chosen in part to emphasize the overwhelming nature of chronic pain. Treating pain is immensely

important. Pain takes control of a person's life, which is why pain relief refers not merely to a physical process but to an emotional and spiritual one as well.

Throughout the book I will explain what we mean medically when we use the terms "body" and "mind." Many people become confused by the distinction, including physicians, nurses, and other health care professionals. When it comes to chronic disease of any kind, and especially the problem of pain, the distinction is often meaningless. The word "body" means the part affected by injury or trauma to the tissues (often called "noxious" injury), which is usually but not always measurable by tests. The word "mind" connotes the subjective experience of pain, the emotions, and the responses in the brain, neurological, and hormonal systems which respond to our thoughts and feelings. In fact, these are really complementary facets of the same thing. In explaining a person's total response to injury, I will often use the term "bodymind," in order to remind the reader that this complex interaction includes parts of our physiology which were once thought separate.¹⁵

As long as Western medicine focuses on the simply "physical" aspects of pain it will miss the true nature of patients' suffering. When we heal pain, we *do* comfort the spirit.

In addition, this book explores the future of pain treatment, including important "alternative" treatments. Although public awareness of complementary and alternative medicine (CAM) is recent, such methods have been a part of pain treatment in mainstream medicine for decades. Fundamental to CAM treatments is a recognition of the power of the mind and of spirituality. A reading of this book will make clear why that is important.

As an anesthesiologist and pain specialist, I have worked with patients in pain clinics for nearly two decades. I have become convinced that the healing of chronic pain must come, ultimately, from within. Physicians, nurses, therapists, even family members and friends can help greatly, but they cannot by themselves cure chronic pain.

This seems on the surface like a frightening statement, since most people believe that modern medicine can cure just about anything. Unfortunately, this is not the case. The reality is com-

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plex but encouraging. Chronic pain is such an all-encompassing experience (you'll see why) that its healing requires time, effort, patience, and trust in oneself. The "cure" for chronic pain—where there is one—is a process, not merely a drug, nor a surgical procedure. It is not magic—it is elegant science—but its unfolding may appear magical.

Readers who are skeptical (and I myself was, once) will be persuaded by the scientific evidence that supports a multifaceted approach to chronic pain. The chapters that follow give examples of common pain problems to illustrate how our biology presents itself in symptoms and physical and emotional signs.

Much of this book is based on studies cited in the text. Sources for help are provided at the end of the book. (However, this book is not intended to replace the advice of your own physician, but to supplement it. And the information presented here reflects current research on pain management at the time it went to press.)

It is time for all of us as human beings to insist that our medical care be as complete and humane as possible. For this reason, much of the information in this book goes well beyond the boundaries of traditional Western medicine. That this should be true is obvious to those of us who accept the bodymind concept of illness and pain. There are many health professionals who believe that we need to do a better job of listening to patients and helping them regain their health. Once we understand pain, we shall see more clearly what can be done to treat it effectively. It is possible to stop the cycle of pain and injury, and to make life feel worth living again.

How We Think About Pain



PAIN AND EARLY EXPERIENCE

What we believe about pain as a society and as individuals affects how we respond to the problems of pain and injury. Our expectations and actions can influence how much pain we feel and for how long.

We first come to understand pain both when we experience it in our youth and when we observe others in pain. As children exploring the world, we sometimes ignore warnings from our parents, suffering many minor injuries and perhaps one or two major ones. These are unpleasant, and hence powerful, learning experiences.

Here is an example: Kelsey, a four-year-old girl, is told by her mother not to climb up on a wall. But her natural curiosity gets the better of her, and she hops up, balancing three feet above the ground. She's jumping along happily, and just as her mother tells her one more time to get down, she slips and falls. What happens? Kelsey is frightened by the shock of the fall. The force causes some scrapes and bruises and she begins to cry, partly because of the pain but also for reassurance and comfort. Over the next days or weeks, depending on the injury, she learns about the pain associated with the healing from what doctors call a "minor acute trauma." Her mother hugs and kisses her, puts a colorful bandage on the scrape, and reminds her to be more careful next time. She will rest the injured area, protect it (if she reinjures it, it hurts even more), and think seriously about not climbing on that wall again, or at least watching her step!

This kind of acute pain is immediate and undeniable. It takes over the entire body and focuses our thoughts and actions on the

pain (or pain relief), and on avoiding further injury. It is so powerful it resists all our efforts to express it except in very simple language.

As Elaine Scarry writes in *The Body in Pain*, "Physical pain does not simply resist language but actively destroys it, bringing about an immediate reversion to a state anterior to language, to the sounds and cries a human being makes before language is learned."¹

Indeed, pain is often expressed nonverbally. A parent can distinguish a child's cry of pain from other cries, and from those of other children, just by the sound. It is difficult to explain pain in words, as most pain patients know. In her book, Scarry notes that this difficulty in verbalizing pain affects clinical care of medical problems. What's worse, while Western science and medicine rely on data and measurements, pain is difficult to measure. Because pain is hard to quantify in objective terms, it is easy for an observer to minimize it or even ignore it. Despite the presence or absence of outward physical signs of injury, pain exists *within* a person. Thus by its very nature it tends to isolate an individual from others precisely when their understanding is crucial.

ACUTE PAIN AND REACTIONS TO INJURY

The example of common childhood injury described above may seem trivial, but in fact it reveals a host of important reactions to injury, and the contributions of such childhood learning to our beliefs about pain. Our beliefs and past experience become particularly critical when we experience *chronic* pain, because our early understanding of acute pain and trauma does not prepare us for the type of chronic pain associated with disease states or repeated injury. However, familiarity with the biology of acute reactions and stress is the basis for understanding how these reactions are modulated when pain becomes chronic.

In Chapter 2, I return to the example of acute injury to talk more about the biology of pain. There are specific pathways in the central nervous system (CNS) that carry messages back and forth from parts of the body to the brain and spinal cord. Hormones and neurotransmitters carry chemical signals to special-

ized receptors throughout the body. (Neurotransmitters might be compared to little keys that open doors to let signals flow, and receptors to the locks fitted to the keys.) Thoughts and emotions affect these biological responses, as I show.

Suffice it to say for now, as we experience injury and healing in our youth, we learn how to get on in the world without suffering too many near-death experiences of our own making. We live to adulthood, becoming more careful as we age. We see how our bodies change with aging, and then we go on to try to teach what we've learned to our offspring.

PAIN, RELIGION, AND PHILOSOPHY

It is impossible to discuss pain without considering how religious and cultural beliefs affect our conceptions of it. In the Judeo-Christian tradition, for example, many stories in the Bible suggest that pain and injury may be a message sent from God.² The quintessential example is the story of Job. Since Job does not deserve the pain and suffering heaped upon him, the moral of the story concerns permanent faith more than temporary affliction.

Another biblical picture of suffering comes from Isaiah: the concept of the suffering servant. The suffering servant nobly takes on pain in order to help others. For example,

But you, Israel, my servant, Jacob, whom I have chosen, the offspring of Abraham, my friend; you whom I took from the ends of the earth, and called from its farthest corners, saying to you, 'You are my servant, I have chosen you and not cast you off'; do not fear, for I am with you, do not be afraid, for I am your God; I will strengthen you, I will help you, I will uphold you with my victorious right hand. (Isaiah 41:8-10, NRSV)

and later,

See, my servant shall prosper; he shall be exalted and lifted up, and shall be very high. Just as there were many who were astonished at him—so marred was his appearance, beyond human semblance, . . . He was despised and rejected by others; a man of suffering and acquainted with infirmity; and as one from whom

others hide their faces he was despised, and we held him of no account. Surely he has borne our infirmities and carried our diseases; yet we accounted him stricken, struck down by God, and afflicted. But he was wounded for our transgressions, crushed for our iniquities; upon him was the punishment that made us whole, and by his bruises we are healed. (Isaiah 52:13–14, 53:3–5)

In the New Testament, Jesus applied this concept to himself.

Depending on the circumstances and our religious and cultural beliefs, we may feel like Job that pain is a punishment for bad or foolish behavior. We may believe that we should prove our strength by grinning and bearing it. We may sometimes feel that suffering and pain serve an important purpose. Alternatively, we may feel that calling attention to our pain will bring us sympathy and help. There are clearly different ways of thinking about pain and suffering, and some may apply in some cases but not in others.

In many Eastern religious traditions, suffering is understood as a part of the human condition, not as a punishment for one's actions. One neither seeks out suffering, nor runs away from it. This view of suffering (i.e., not blaming the victim) has permeated the New Age movement and may claim to be one of its most important positive principles. Another important development in bringing concepts from Eastern and Native American traditions into Western thinking is the acceptance of the mind and body as one, and as part of a greater whole with others. This topic will be treated later in the sections on nonpharmacologic and alternative methods of pain relief.

By contrast, in the West the Christian Church reinforced the philosophical idea that the mind and body are separate entities. Scientists were allowed to investigate the science of the body without crossing dangerously into the realm of religion. The mind was considered part of the world of God interacting with man, while the body could be investigated as if it were a physical machine. In the Renaissance, anatomists like Vesalius began to carefully dissect the body, William Harvey described the flow of blood, and countless others began to explain how body processes worked.

The mind/body duality concept was developed most fully by the French philosopher and mathematician René Descartes, throughout his philosophical works. For example, he writes: "That power by which we are properly said to know things is purely spiritual, and not less distinct from the whole body than blood from bone, or hand from eye" and, "I have often distinctly showed that the mind can operate independently of the brain; for certainly the brain can be of no use to pure understanding, but only to imagination or sensing" and finally, "And although probably...I have a body, which is very closely conjoined to me, because nevertheless, on the one hand I have a clear and distinct idea of body, in so far as it is only an extended thing, not thinking, it is certain that I am really distinct from my body, and can exist apart from it."⁴

We find an example of the danger in believing that pain is a punishment in the history of pain relief during childbirth. Religious and cultural biases have impeded the use of modern methods in relieving pain and making childbirth safer for both mother and infant. Many believe that women deserve to feel pain when delivering a child because of the sin of Eve, who is blamed for the expulsion of humankind from the Garden of Eden:

To the woman he said, I will greatly increase your pangs in child-bearing; in pain you shall bring forth children, yet your desire shall be for your husband, and he shall rule over you. (Genesis 3:16)

Since the books of the Bible were written and compiled by men, at times when biology was only understood in primitive ways, their implicit gender bias becomes obvious. In the popular press such pain is often regarded as purifying or ennobling.

In fact, the pain associated with childbirth has no physiological benefit to baby or mother. On the contrary, it may trigger potentially harmful side effects, such as hyperventilation which decreases blood flow to the uterus and the baby. The mother's uterine contractions are vital for the birth process, but the pain associated with these strong muscle contractions is not. Some advocates of natural childbirth insist that it gives mothers psychological fulfillment, and those who wish to undergo the experi-

ence without pain relief can choose to do so. Anesthetic techniques used for labor and delivery, and even for Cesarean section, however, do not affect the mother's state of awareness: even if a woman needs pain relief for childbirth, she misses none of the emotional experience of seeing her baby born.

Part of the misunderstanding about pain and childbirth may derive from the variability of pain responses among women. Although some women can tolerate the pain of childbirth, nearly two-thirds of women in labor characterize the pain as being severe or intolerable.⁵ One hundred years ago, women and babies often died in childbirth. Now, such death has become very rare, but Cesarean sections comprise about 15 percent of the deliveries in the United States (to protect the baby and/or the mother). And of course, anesthetic pain relief is needed for the surgery. Of the women who have a normal vaginal delivery, those who receive epidural anesthesia generally have the best pain relief and the greatest satisfaction with the birth experience.⁶

PSYCHIC PAIN AND SUFFERING

The word "pain" has another meaning in the context of this book. One can call it psychic pain, or emotional suffering, or, in some cases, simply stress. (One has to be careful with definitions here, because the meaning of technical terms from psychology and biology tend to be blurred when they become part of the popular vocabulary.)

In his book *Further Along the Road Less Traveled* (1993), Dr. M. Scott Peck notes that this type of pain is a significant part of being human and having consciousness.⁷ We humans are all aware of our mortality, and when we experience losses in our lives, we call this "pain." It is pain, in a real sense. Dr. Peck calls it "psychic pain."

There is much pain in clinical depression, in neurosis, in spiritual emptiness, in grief reactions. Despite the fact that we as a culture deny that psychiatric illness pervades our society, its presence cannot be ignored.

"Psychic" pain, if denied, will not go away. Usually it intensifies, manifesting itself in destructive behavior, in mood swings,