Advances in Pain Research and Therapy, Vol. 11. Edited by C. S. Hill, Jr. and W. S. Fields. Raven Press, Ltd., New York & 1989.

The Relationship Between Pain and Suffering

Eric J. Cassell

Cornell University Medical College, New York, New York 10021

In every culture, medicine is grounded in the relief of human suffering. That is what patients and the public believe to be its mission. Many of us were drawn into the treatment of pain or research by the relationship of pain to suffering. Research on pain, however, does not bring us closer to an unby well-meaning and competent physicians may suffer from their treatments as well as from their diseases. If the relationship between pain and suffering were better understood, our treatment would be more effective, and our research might be more closely related to the problems that first drew us to the field. Discerning the distinction and relationship between pain and suffering will, I believe, lead to the solution of other difficult problems in the care of the sick.

PAIN AND SUFFERING DISTINGUISHED

We can only know someone is suffering by observation, inquiry, or the awareness that he or she is subject to something that we believe causes suffering. Suffering, like pain, is not objectively measurable, yet it is a universally accepted category of human experience. The relationship between pain and suffering is not constant. Patients report suffering when pain is overtolerate very severe pain without suffering if they know the source and if they know that the pain will end or soon be relieved. For example, I have had repeated episodes of renal colic. As reputed, the condition is extremely painful, yet it has not been a source of suffering for me. I know what the problem is. I know that it is necessary to obtain adequate pain relief as soon as possible (and that in order to do this, I must stay away from hospital emergency rooms).

On the other hand, even lesser pain may be associated with suffering if it is perceived as never ending or if it is believed to have a dire cause (such as

It

LE

LI

cancer). Clinicians working with terminally ill patients frequently see patients who are grunting with pain and cannot be comforted. Often, they act as if they do not hear what is said to them, and they seem unaware that they are grunting. When their pain has been adequately relieved and it has been demonstrated that such relief will be forthcoming if the pain should return, they will frequently tolerate the same level of pain (by their report) without requesting medication. Frequently, once they are assured that relief is possible, the suffering subsides, although the pain remains. In support of these observations is the well-known fact that it is difficult to relieve the pain of a terrified patient.

People may suffer from pain even when it is not present. Patients with severe and frequent migraines may suffer from the fear that the headaches will return. These headaches have repeatedly ruined what would otherwise have been pleasurable or important occasions. Family relationships, jobs, sports, and virtually everything that is dear to the person have been negatively influenced by the headaches. Yet these patients obtain little sympathy from family or friends. After you have said that you have a headache for the thousandth time, what else is there to say? Not surprisingly, such patients may be obsessed with their headaches and their attempts at relief to the virtual exclusion of other aspects of life—suffering when they do not have the actual pain and when they do. Patients who have terrible pain from malignant tumors but are now free of pain may suffer from the fear that the pain will return. They may repeatedly question their doctors about the possibility of the pain returning and about what will be done should that happen. For some, reassurance is possible; for others, the prospect becomes a living nightmare that no reassurance seems able to relieve.

The distinction between pain and suffering may be clarified by the case of the pain of childbirth. Purely on the issue of the adequacy of pain control, one would believe that epidural anesthesia would be employed everywhere, but this is not the case. In fact, different modalities of pain relief are popular in different parts of the United States. The more important issue seems to be not the adequacy of the method of pain control, but the degree to which the woman is in control of her own labor and delivery.

Other symptoms such as dyspnea, choking, or even diarrhea may be sources of suffering if they are sufficiently severe. In fact, suffering may be present in the absence of any symptoms. Parents, particularly if they are helpless in the situation, commonly suffer at the sight of their children in pain. Extreme poverty may be a source of suffering, as may betrayal or the loss of one's life work.

THE PLACE OF THE FUTURE

Notice the place of the future in all of these situations of suffering. For patients with seemingly overwhelming pain, long-lasting ("never ending")

pain with the accompanying fear of the inability to continue to "take it." or pain suspected of having a terrible cause, a sense of future is necessary to suffer. In each of these instances—at the moment of suffering—the pain is not overwhelming, the person is "taking it," and the fact of a dreadful disease does not yet exist. The body knows no future and therefore cannot worry. The body cannot supply information about the future because, at any moment, for the body, the future does not yet exist. Only beliefs, memories, ideas, or fantasies can supply the information necessary to provide a "future." In other words, to suffer, there must be a source of thoughts about possible futures.

To summarize thus far, although suffering may attend pain, they are distinct. There may be pain without suffering. There may be suffering without pain. But there seems to be no suffering without an idea of the future. Bodies do not have the beliefs, concepts, ideas, or fantasies necessary to create a future; only persons do. From the foregoing, one can conclude that, although bodies may experience nociception (stimuli defined as painful), bodies do not suffer. Only persons suffer.

SUFFERING DEFINED

A definition of suffering is suggested by clinical experience. Suffering is a state of severe distress induced by the loss of the intactness of person, or by a threat that the person believes will result in the loss of his or her intactness. It will continue until the threat is removed or the person is reconstituted. Suffering may occur in relation to any aspect of personhood.

THE NATURE OF PERSON

The importance to pain research of the distinction between pain and suffering starts with the understanding that a person is not a psychological as distinct from a physical thing. Research on pain has often been carried out with a model in which the physical phenomena are considered to be distinct from psychological phenomena, especially in the sense that the physical is real and the psychological is not. The concept of person is difficult for science and for medicine. If a person is not a body (and a person is certainly more than merely his or her body), then a person is not an object of science in the classical sense. But persons are also not merely minds and so do not "belong" to psychology, philosophy, or religion. This is true if only because persons have bodies and cannot be the same person with a different body or even the same person if something major happens to the body. One can see why the mind-body duality essentially displaced the concept of person; it had no home since it was neither mind nor body. Furthermore, as we shall see, a person is not at any particular moment the entire person because a person always has a past and a future. Thus, rather than being completely

41- 72-15 RAIGHT

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150 151

152

instantiated in front of an observer, a person is a trajectory through time, a historical route, to use Whitehead's term.

To make matters more complex, the definition of person-in the sense of what an observer means by saying of someone that he or she is a personkeeps changing. At this time and in this culture, when we speak of ourselves as persons, one of the characteristics that we value is our privacy. But in classical Greece, privacy would not have been a thing to value, but something to shed as one tried to become at one with the changeless values of the universe. We also prize our individuality, our distinctness from one another; yet before the 11th and 12th centuries, the idea of individual people being prized for their distinctiveness seems not to have been present. One has merely to see paintings and statuary from before and after that era to notice that faces looked alike before and began to be different after. On the front of the Cathedral of Notre Dame in Paris, the early statuary all have essentially similar faces, but later, the faces assume individual differencesmore marked as the centuries went by. Political individuality is important to the notion of person in the Western democracies, yet the idea did not achieve currency until the 17th to 18th centuries. The concept of person-what is meant by the word person-continues to evolve, as is clear by the 20th century contribution to its meaning. Now it has an intensely personalized and interiorized meaning in addition to its previous content. We are proud of our differences. of our mental life, and of the importance of our individual selves in the scheme of things in a manner not previously described, understood. or accepted.

A TOPOGRAPHY OF PERSON

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

It is not fruitful to attempt to understand the nature of a person by a reductive analysis in the manner one might employ to understand the liver. But it is useful to see how many aspects there are to being a person. In a previous discussion of this subject (1), I laid out a topography of person. explaining each feature in some detail. The reader is referred to that discussion for more particulars. Here, let me merely list those features of the topography. Persons have personality and character. Some personalities and character structures tolerate some illnesses better than do others. For example, if it is essential that a person maintain a sense of being in absolute control of events and circumstances, the loss of control that often accompanies illness can be devastating to the point of disrupting the intactness of the person. When that occurs, the person will suffer. Persons have a lived past. One's past is an active part of the present because it contributes meaning and interpretation to the events of the present. The present can make a lie of the past or destroy its validity, and when that occurs, the person, in the present, will be injured. The lived past of a person's family is also part

of a person. What happened to my father, for example, the fact that he had hay fever, makes quite reasonable the appearance of hay fever in me. Yet strictly speaking. my hay fever has nothing to do with his. People expect to follow the pattern of the parents to such a degree that often otherwise intolerable illnesses may be accepted by a patient because a parent was similarly afflicted. On the other hand, patients may disbelieve a diagnosis of (say) cancer because no one in their family ever had it.

Persons have a society and a culture. I put it in that manner because our society and culture are within us; we do not merely live in them as if they were something external. The height of steps, the way food is taken, transportation, dress styles, what is considered acceptable in looks and odorsall of which are socially or culturally determined-may have a profound effect on the experience of a sick person. It is difficult to remember, but nonetheless true. that almost everything that affects the physical function of the body affects its social function as well. Persons have families, and their relations with their families, past, present (and future), pervade virtually every aspect of life when they are well and when they are sick. Persons have other relationships with friends, work associates, and casual acquaintances. These may be disrupted or changed by illness. People also have relationships with themselves. Intense, even destructive, conflicts may erupt when the demands of the body in illness come in conflict with other aspects of the self. For example, the need to "carry on" with work as usual may be extremely important to an individual, yet such continued activity may worsen the illness. Much of what is considered poor compliance with medical regimens may arise from these kinds of inner conflicts.

Persons have roles. Not being able to perform these roles when illness occurs may destroy the person. The behavior of sick physicians is notorious in this regard. But others also know and value themselves only in the performance of their roles. When illness makes that impossible, suffering may follow. Persons have day-to-day behaviors. They sleep, eat, dress, work, and travel in habitual ways that are extremely durable, hardly changing from day to day. Often symptoms show themselves and are recognized as symptoms by their disruption of these behaviors.

Persons have bodies. For some, the body is a place of hidden terrors waiting to strike, whereas for others, it is the palace of their desires. The relationship with body is frequently altered by illness—patients may be enraged with their bodies sufficiently to injure them, apparently oblivious of the fact that, in so doing, they injure themselves. Persons have unconscious lives. They are subject to motivations, fears, desires, and needs whose origins may be unknown to them. For example, much has been made in the recent cancer self-healing movements of the notion that cancer occurs because of some unconscious need on the part of the patient.

All persons have political dimensions, power relationships with the polity, within the institutions in which they work, and with each other. Illness de-

31-1 32-20 RAGEN

stroys personal power and may produce devastating feelings of powerlessness. Every person has a secret life with ideas, thoughts, fantasies, and needs that are not part of the continuum of the public person. Although sexual factors are most commonly associated with the secret life, they are not necessarily its only content. One is reminded of the movie The Secret Life of Walter Mitty, of years back, in which the meek protagonist lives a life of heroic exploits in his fantasies. Illness may destroy such dreams. It may also separate someone from a real but secret relationship that is the only thing that has made an otherwise bitter life endurable. When that happens, the sick person suffers a double loss; of the loved one and of public comfort for the loss. Every person has a future in which he or she believes. Serious illness destroys those beliefs. All persons have transcendent dimensions-connections to others, to religious beliefs, to their country, or to other things larger and more enduring than themselves. These can give meaning to their lives and even make illness and death acceptable. Their absence induces a terrible state of personal meaninglessness and hopelessness.

PACK7 7200\$\$\$25

As I noted earlier, suffering may occur in relation to any aspect of person. Put another way, each of these aspects of person is like an extremity or organ that is subject to damage and that, when damaged, injures the whole. No one part of a person is separate from the others. We are of a piece. Change one part of us and all the other parts—including the body—also change. This is in part because a person is not a thing but a trajectory through time and space, a cohesive process whose appearance and existence at any moment is determined not only by its remote past but what has happened to any part of it the moment before. We are better at describing objects; there is not a good language for process. Any time one attempts to describe a person, the description seems complex or confusing because it must always be given in process terms—in the terminology of change. This should not deter us from trying always to understand persons in terms of process—change over time—because pain is also a process. something that never holds still but instead changes through time.

THE RELATIONSHIP OF PAIN TO PERSON

It is a source of confusion that the process of pain does not exist independent of persons. In a recent review of pain in newborns, the author acknowledges that pain and nociception are not the same thing, but then uses the two terms interchangeably. The error is common and understandable, but an error nonetheless. When it is acknowledged that pain is something experienced by persons and is different from nociception, it is occasionally implied that pain does not exist. Pain, in this view, is merely a report, and only the report exists. It has also been suggested that pain is culturally rel-

 ative—that some experiences are reported as pains in some cultures but not in others. Others have pointed out that some pains are experienced as ecstasy and thus are not really pain. Most of this is nonsense arising from the confusion between the experience of something and the meaning that is assigned to it. To unravel these confusions, it is useful to dissect the experience into its parts.

Certain kinds of stimuli elicit the sensory response of nociception (in the absence of abnormalities of the nociceptive apparatus) now and forever, in every culture. The sensory response is perceived. (At least for the time being, disregard consciousness, which is a confusing element.) As such, the sensory response is an event for the perceiver. All events are assigned meaning. That is to say, all events must be integrated into the experience of the perceiver—they cannot, except by the most difficult act of conscious will, float free and unexplained. A percept, of which we are speaking, is a percept of something. Pain is not a something unless it is the pain of something.

Meaning, as used here, includes both significance and importance. The significance of something is what the thing implies. Dark clouds imply rain. This pain signifies something sticking me. That chest pain signifies heart disease. The importance of a thing is its value. The rain signified by the dark clouds will ruin our picnic—or conversely, save our crops. The sticking that the pain implies is from a pin in my dress, a matter of little importance. But the sticking might also be a scorpion. Both senses of meaning—thus, meaning in general—are derived from the aspects of person discussed earlier. That is, we know the implications of things from past experience, family history, relationships, experience with our bodies, and so on. The aspect of meaning that is the importance of the event—the value dimension—also arises from all aspects of the person.

Assigning meaning to events continues the pain process by doing two things: influencing perception and predicting the future. As the sensory responses to the stimuli continue to be perceived, they are intensified or suppressed, contrasted or blended (with other responses) to intensify and support the significance that the process has been assigned or (less commonly) to weaken and make uncertain the original interpretation. Usually sensory material that puts in doubt the perceived implication will tend to be suppressed. Awareness is focused by meanings that are important. The spotlight of awareness further influences perception and at the same time reinforces or changes meaning. This further influence on perception may occur at the sensory level or at the level of transmission of the nociceptive message.

Meaning also predicts; it is a statement about the future. All beliefs have a future term. Even beliefs about apples not only tell about them in some static definitional sense, but also include where they come from and what they become. For example, "cancer pain is horrible," "the pain of burns becomes . . . ," "coccygodinia continues on and on." The prediction further influences the perception. Given the choice between interpreting new events as trivial or threatening, people often assign the worst possible mean-

H-_ 72-27 RAIGH

. I

ing. Because of this tendency, patients frequently present histories of pain in which only those factors that support a fatal diagnosis are remembered, whereas the facts that would allow a nonthreatening diagnosis are suppressed. (Fortunately, the original sensory impression remains to be reelicited and reinterpreted. If this were not the case, patients histories might be worse than useless instead of the irreplaceable sources of information about the past that they are.)

A statement about the future may contain a threat, as in the belief that

A statement about the future may contain a threat, as in the belief that cancer pain is unendurable. When the threat is sufficient, the person will believe that his or her intactness as a person is in danger. At that point, suffering ensues. Suffering influences perception by changing the individual's total focus toward the source of suffering. The entire apparatus of perception and the assignment of meaning then contributes to the suffering. As this occurs, the person begins to adapt to the threat, and the nature of the person starts to change. This entire process must be seen as occurring in little droplets of complex experience strung out along a thread of time that may occupy minutes or years.

THE SCIENTIFIC STUDY OF PAIN

Pain and suffering are phenomena that cannot be understood if mind and body are held to be separate. From the point of view of a classic concept of science, the inability of researchers to hold pain in their hands as an object separable from the person who has the pain is an overwhelming disadvantage. It makes the truly scientific study of pain impossible—not difficult, but impossible. Until now, recognition of this difficulty seemingly has not been accepted by pain researchers. Mostly they have attempted to force pain back into the classic scientific mold by blinding themselves to the individual nature of pain sensation and by acting as if nociception and pain were the same thing. It makes no sense to keep denying the fundamental nature of the pain experience in an attempt to force it and its study into the reductionist paradigm. It makes no more sense to attempt to force its understanding or research into psychologistic ways of thought as if pain were a "mental" or psychological phenomenon in the narrow meanings of those terms. To force it into these boxes is to lose the great opportunity for understanding the human condition that the investigation of pain and suffering offer. Systematic studies of pain are entirely possible, but they must be seen as what they are, belonging to the realm of the social sciences rather than the biological sciences. (Studies of nociception or its components, however, would remain part of the biological sciences.) In all of this, it is not the nature of pain that is the problem-pain, after all, is what it is and has always been. The difficulty arises because people keep trying to understand pain using tools that were not designed for its study but that were perfected for problems like ion

flux through membranes. Because of the importance of pain as well as the nature of pain, pain can also be seen as a phenomenon that provides the perfect arena for the study of: (a) whole persons; (b) process as opposed to isolated events; and (c) the interactive (feedback) nature of human processthe influence of the person's past, roles, family, culture, and other personal factors on the process. I have, throughout this chapter, made assertions about pain and the origin of suffering, its nature, and relief that are based primarily on clinical observation but that are open for systematic study. The modern temptation to go to the molecular basis for everything must be avoided if pain and suffering are to be understood. Again and again, I have listened to discussions that start out at the level of human suffering and end up with presentations about the molecular mechanism of nerve transmission. It is no trick to avoid the complex by discussing the simpler level of organization: the real accomplishment is to explain the complex phenomenon (human suffering) by what has been worked out at a simpler level, for example, nociception.

THE RELIEF OF PAIN AND THE RELIEF OF SUFFERING

How should clinicians like myself regard a patient in pain? Let me reiterate the steps in the process. A noxious stimulus produces its special sensory response. The resulting sensation is perceived by the person. who immediately begins to add meaning. The meaning influences the perception and perhaps the sensation itself. Subsequently (on a moment by moment basis), further meanings and behaviors are elicited in response to the continued sensation. In consequences of conscious awareness, the perception of pain is either increased or decreased. This continuing process entails attempts, up to and including seeking help, to reduce the stimulus and the sensation. The efforts to reduce the pain, in themselves, have an influence on its perception and its meanings that feed back into the process. If the threat to the person is perceived to be great enough to endanger his or her intactness, suffering ensues.

Even in this abbreviated description, the relief of pain and. more important, the relief of suffering clearly can be attempted at any, more than one, or all the steps in the process. The source of the pain—the stimulus—may be removed or reduced. The sensation can be diminished. Perception may be altered. The meaning attributed to the perception can be changed. Behaviors in response to the pain can be altered. Or finally, the person can be encouraged to change in ways that alter the threat and restore intactness. The time scale of the interventions and their specifics depends on whether acute or chronic pain is involved. With pain of any severity, source, or duration, the central principle is that intervention can occur at any point in the process of the generation of pain and suffering. Guided by that postulate,

29 32.18 34 A. I

PAIN VERSUS SUFFERING

the possibility of relieving pain and suffering—which is the fundamental mandate of medicine—is vastly increased.

REFERENCE

91

88 89 90

92 93 94 Cassell EJ. The nature of suffering and the goals of medicine. N Engl J Med 1982;306:639-645.

11. -