Mood Pain: A Comparative Study of Clinical Pain and Depression

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Abstract

Mood pain refers to those experiences of depressed persons comparable to the physical pain of injury or illness. In the present study we interviewed thirty depressed psychiatric in-patients, who had previously experienced severe physical pain as a result of injury, illness, or surgery. We asked the patients to compare the pain of depression with the previous physical pain to indicate which might be preferable should either be re-experienced, and to explain the reasons for their answers. The results indicated that the patients viewed depression as more painful than the previously experienced physical pain. The implications of these findings are far reaching not only for the further investigation of pain and depression, but also for the clinical management and treatment of chronic pain, depression and suicide. The first-person accounts of the depressed and often suicidal patients in this study suggested alternative ways of viewing and understanding depression. Future research and clinical applications of the results were discussed.

Many years ago one of us (Osmond), then first assistant in the Department of Psychiatry, Saint Georges Hospital, London, treated a very depressed 70-year old Methodist minister. He responded quickly and completely to a few electroshock treatments, making a rapid and uneventful recovery. He was then seen at outpatient from time to time. He failed to keep two consecutive appointments, causing some concern, but his absence was ascribed to foul weather. When at last he reappeared he looked so thin and wan that we thought he had suffered a relapse. He quickly assured us, however, that he had missed his appointments because of an accident in which a rubber hot water bottle which he had used to warm his bed during cold weather had ruptured, spilling scalding water on his lower

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abdomen, inner thighs, and genitals. He said that this misfortune was the most painful event in his long life.

Remembering his wretchedness when depressed, the psychiatrist said, "Tell me, minister, if you had to choose between these last weeks of agony and your depressive illness, which would you pick?" "Doctor," replied the minister, "you don't have to ask that; you must know." The psychiatrist persisted until the minister, becoming a little impatient, said, "I would suffer the scalding a hundred times rather than have the depression again. Every night I pray God to let me die before the depression returns. When I was scalded I prayed for relief and I was heard, but during the depression I lost my faith. There was no comparison between those two kinds of pain."

More recently, a right-handed author and journalist wrote, "I have suffered, as you know, from depression for 20 years, and at the various hospitals I have entered I have told the psychiatrists and psychologists that if they could cure me of my depression, I would donate two legs and my left arm. I told them that, if given the choice 20 years ago between recurrent depression and loss of two legs and an arm, I would not have hesitated a moment. They responded with amusement and disbelief, an indication of how little they understood the comprehensive pain of depression. It is a sword that dangles over every job I get and over every meaningful relationship. It is pure hell. People who lose their legs or get cancer or are injured don't often kill themselves. But it is easy for me to understand why the depressed person does." (1)

In his book about care of the dying, Lamerton (2) discusses the differences between mental and physical pain. Referring to the grief associated with dying, he states, "What is even more humbling is to realize that there is another pain ... this 'spiritual pain' as we call it, can also present as an apparently physical complaint... Physical pains we suffer alone; mental and social pains, particularly grief, affect the whole circle of our acquaintances. But the greatest pain of all, a pain of the spirit, is as great as mankind."

The pain of depression has been well documented for many years. Samuel Johnson, like his biographer James Boswell, suffered from recurring depression and, due to his many serious physical illnesses, was well acquainted with pain and misery. He once wrote an Easter prayer asking, "Almighty and most merciful Father ... let me not be created to misery... Deliver me from the distresses of vain terrour." Dr. Johnson later stated, "I would suffer a limb to be amputated to recover my spirits." (3). Sir Julian Huxley, himself troubled by recurring bouts of depression, ventured an expression of his own personal torment in "A Freudian Faustulus": "Whither to turn? The vesture of my being begins to tear — my very being's self is rent, with ghastly rendings of live flesh. And through the rents, intolerable shapes protrude themselves upon me. They are not ME — I swear and yet, oh God, they live upon my life, and somehow part and parcel of it, though I knew it not. What foul and unsuspected intimacy.."(4) More recently the pain of memory loss and depression was described by Martha Lear in her book *Heartsounds.* Referring to her husband's difficulties with memory and brain "fogginess" after heart surgery, she wrote, "His pain was altogether beyond my reach. I think he would rather have lived in an iron lung with his mind intact." She recalls his description of this mental anguish, "He could not, he said later, describe the awfulness of that to anyone..." He said, "The most painful thing was what happened to my mind. Nothing in my life was ever worse than that or ever will be." (5). At this time, in spite of his bypass operation, he could walk only a few blocks and required huge amounts of diuretics. Yet, it was not his heart, and the threat of invalidism and death, which preoccupied him, but the failure of his mind.

Referring to experiences like Samuel Johnson's "vain terrour," Richard Lamer-ton's "spiritual pain," and Sir Julian Huxley's "mental hell," those who suffer from depression report that they are afflicted by pain comparable to, if not worse than, the pain of physical injury. Some even express a willingness to endure physical pain in preference to having a depression.

In the scientific literature on pain and depression, there are several studies on the subjective measurement of pain. Beecher

and his colleagues (6) developed elegant and extensive measures for the subjective measurement of pain in an effort to quantify the effects of various forms of anesthesia. Numerous studies over the past 20 years have reaffirmed the importance of the subjective or emotional aspects of pain, contributing to some reformulations of the earlier Melzack and Wall (7) gate control theory. Wall (8) stated that pain is better classified as an awareness of a need state rather than as a sensation, and that it serves more to promote healing than to assist the organism in avoiding injury. Thus conceptualized, pain has more in common with the phenomena of hunger and thirst than it has with seeing or hearing. In the period immediately after injury, pain has only a weak connection with injury, but it has a strong connection to the body state. The study of pain has progressed from the simple one-to-one relationship between injury and sensation, to a more refined notion of pain as a reflection of a holistic body state. In addition to studies on the measurement of pain, the literature offers articles on pain as a learned response (9), pain, marital adjustment, and family dynamics (10), pain and self-concept (11), and pain as a substitute for fear of death (12).

There is a vast literature about depression, ranging from early psychoanalytic writing and the hypothesis of internalized aggression as the underlying factor in human depression (13), to more recent formulations of authors such as Ellis (14) and Beck (15), suggesting cognitive explanations for depression. There is also a growing body of work in the area of neurotransmitters and depression (16), suggesting direct physiological links with the human experience of depression. The literature on depression has evolved from philosophical to psychological, to physiological accounts, to its current mixture of "mind" and "body" factors accounting for depression.

There are several articles on the relationship between pain and illness behavior (17), pain, depression, and illness behavior (18), pain as a psychiatric symptom (19), pain correlated with mood changes (20), and the treatment of chronic pain with psychotropic medications (21) and (22), and with ECT (23). Finally, there are a few studies on the direct relationship between pain and depression (24). There are no articles, however, which describe studies asking depressed patients explicitly to compare the pain of depression with any kind of previously experienced physical pain. In this paper, we present the results of such a study.

Method

We conducted the study by asking depressed patients with a history of physical pain to describe their depression, to describe their physical pain, and to compare these experiences. They were asked to tell us which was worse and which, if they were forced to make a choice, they would rather re-experience.

The sample consisted of 30 psychiatric inpatients, 15 of whom were female (mean age of 38.8) and 15 of whom were male (mean age of 39.9). All patients were suffering from depression, with psychiatric diagnoses including depressive neurosis or anxiety (18 patients), dysthymic disorder (3 patients), schizo-affective disorder, depressed (5 patients), and manic-depressive illness, depressed, (4 patients). Patients with mixed or questionable diagnoses were excluded from the study. All patients had histories of serious, life-threatening physical illness or injury, including heart attacks, cancer, serious injury, and multiple surgeries. Medical history was taken on admission by the attending psychiatrist and again on a later, independent physical examination by an internist; only those patients who had histories of serious, painful illness were included.

Patient interviews were conducted individually in a psychologist's office, and all interviews were taped and later transcribed. Each patient was interviewed regarding the symptoms precipitating the present psychiatric hospitalization for depression, and was also asked about the previous medical-surgical experiences. Each patient was then asked which experience, physical or psychiatric, he or she considered "worse," and to give reasons for this choice. Each patient was also asked which, if forced to make a choice, he or she would rather experience again, and to give the reasons for this choice.

TABLE 1
Psychiatric Patients — Physical Illness

Pt. No.	Sex.	Age	Psychiatric Diagnosis	Physical Pain	Physical versus Psychological "Worse"	Physical versus Psychological "Prefer"
1.	F	35	Depressive neurosis	Multiple surgeries	Psychiatric	Physical
2.	F	32	Depressive neurosis	Back injury/surgery	Psychiatric	Physical
3.	F	46	Depressive neurosis	Diabetes	Psychiatric	Physical
4.	M	32	Depressive neurosis	Heart/stroke/surgery	Didn't know	Didn't know
5.	F	46	Schizo-affective	Carcinoma/lung/surgery	Psychiatric	Physical
6.	F	33	Depressive neurosis	Multiple surgeries	Psychiatric	Physical
7.	F	26	Anxiety neurosis	Diabetes	Psychiatric	Physical
8.	F	43	Schizo-affective	Multiple surgeries	Psychiatric	Physical
9.	M	42	Depressive neurosis	Leg injury/lung	Psychiatric	Physical
10.	M	21	Schizo-affective	Diabetes	Psychiatric	Physical
11.	F	26	Depressive neurosis	Carcinoma/surgery	Psychiatric	Physical
12.	F	28	Manic depressive	Gunshot wound/surgery	Psychiatric	Physical
13.	M	48	Depressive neurosis	Heart attack (6)/surgery	Psychiatric	Physical
14.	F	62	Dysthymia	Heart/brain/surgery	Psychiatric	Physical
15.	F	43	Depressive neurosis	Heart/clot/surgery	Psychiatric	Physical
16.	F	49	Schizo-affective	Carcinoma/surgery	Psychiatric	Physical
17.	M	40	Depressive neurosis	Heart attack (4)/surgery	Psychiatric	Physical
18.	M	31	Manic depressive	Burn	Psychiatric	Physical
19.	M	32	Schizo-affective	Heart/surgery	Psychiatric	Physical
20.	F	51	Depressive neurosis	Typhoid fever	Psychiatric	Physical
21.	M	45	Depressive neurosis	Injury/shock	Psychiatric	Physical
22.	M	59	Psychotic depression	Heart/stroke/surgery	Psychiatric	Physical
23.	M	23	Depressive neurosis	Gunshot/colostomy	Psychiatric	Physical
24.	F	29	Depressive neurosis	Heart/lung/clot/surgery	Psychiatric	Physical
25.	M	47	Manic depressive	Back injury/mult. surg.	Psychiatric	Physical
26.	F	33	Depressive neurosis	Carcinoma/surgery	Psychiatric	Physical
27.	M	38	Dysthymic	Back injury/mult. surg.	Psychiatric	Physical
28.	M	52	Dysthymic	Diabetes/angina	Psychiatric	Physical
29.	M	40	Depressive neurosis	Back injury/mult. surg.	Psychiatric	Physical
30.	M	48	Depressive neurosis	Back injury/mult. surg.	Psychiatric	I don't know

Results

Table 1 gives a summary of the results of the study, including each patient's sex, age, psychiatric diagnosis, physical illnesses, and comparison of physical pain and depression. As can be seen from the table, none of the patients interviewed felt that physical pain was worse than depression, and none felt that depression was preferable to physical pain if a choice of which one to re-experience were required. One patient was unable to decide which was worse or which he preferred and one additional patient could not say which he preferred to re-experience.

Typical remarks from the interviews were, "This (depression) is a whole lot worse than anything I've ever had happen to me in my life," (Patient #28), and "If I had to learn to accept one or the other or have my choice, I'd certainly take the physical pain." (Patient #27). Patient #4, who had suffered a heart attack, a stroke, and a subsequent depression, was unable to decide which was worse or which he preferred, stating, "I think this (depression) will be a little bit worse." Two other patients, #13 (with heart attack and surgery) and #30 (with back injury and multiple surgery) were unable to decide which they would prefer to re-experience. Though they decided the depression was worse, they found the physical problem and depression closely related. In each case the depression followed closely after the multiple heart attacks and surgery and disability connected to a back injury.

Reasons given for selecting depression as being worse and preference for re-experiencing physical pain were those often associated with depression: inability to sleep, lost interest and energy, worrying and dwelling on things, loneliness, and feeling uncared for and unloved. Also given were reasons related to suicidal ideation such as having nothing to live for, a lost will to live, and wishing and wanting to die. Other reasons given were related to the special pain of depression, including a "deep hurt," "constant agony," "never seems to go away," and "people don't understand." Interviews with the eleven patients who had attempted suicide showed that they had tried to kill themselves not because of physical suffering, but because of depression. As one patient (#20) stated, "I know that at one point, they thought I might not make it, because they couldn't find out what was wrong. And I prayed to live. Oh boy, did I want to live. When that depression hit I didn't want to live. I wished I wouldn't wake up."

Comparisons of responses of patients who had different illnesses revealed no discernible trend with regard to severity, chron-icity, or life threat of the illness. Patients with heart attacks, strokes, and blood clots were similar in their responses to those with cancer, back injuries, and multiple surgery. According to patients' comments, the "pain" of depression seemed to account for their selecting it as worse than physical pain and suffering, regardless of any factors associated with the physical illness or injury.

Discussion

Our patients described wave after wave of agony beyond expression or understanding, an unsharable misery, a deep hurt powerful enough to take away the will to live. This experience is what we have called, for want of a better word, the "mood-pain" of depression that our patients considered was "worse than anything" and far worse than the physical pain which they had previously experienced and which they said they would take in preference.

The results of this study of patients' perceptions of their depression and physical pain are not very surprising in view of the characteristics of depression and its similarity to severe intractable pain. Neurophy-siologically, psychologically, pharmacologically, and socially, depression and pain are closely linked. We often describe the pain of bereavement or disappointment in much the same way that we describe the pain of toothache or appendicitis. Depression often occurs with prolonged pain or illness. It has been shown that severe pain in one area of the body can spread to others, especially if pain is intractable and lasts more than six weeks (25). In addition, some depressive illnesses manifest themselves as pain of a more or less localized kind, while the MMPI profiles of patients with chronic pain have an elevation in the depression scale (26).

In the early stages of many indubitably "physical" illnesses such as influenza and infectious hepatitis, there is a diffuse discomfort and malaise often described as "depression."

Depression is often seen as an early symptom of migraine. Motion sickness, of which sea-sickness is a familiar example, is a diffuse discomfort often impossible to localize. It is frequently associated with severe depression and sometimes with an openly expressed wish to die.

The relationship between substances and situations that relieve or reduce pain and those that alleviate depression adds further to the similarity of these two phenomena. It may be no coincidence that "laughing gas" (nitrous oxide) is both euphoriant and anesthetic. To his everlasting regret, Freud was so preoccupied with the anti-depressant effect of cocaine that he neglected its local anesthetic qualities. He believed that cocaine would eliminate the craving for opiates, a condition in which there is a generalized sense of discomfort accompanied by depression and anxiety. Blumer treated his depressed pain patients with appropriate anti-depressants and reported that in many of them both depression and pain disappeared (25).

Perhaps our patients, who have experienced both pain and depression, fear the latter much more than the former because severe depression resembles a diffuse, un-localized pain. Pain in human beings, particularly adults, is usually localizable. We ask our patients exactly where the pain is and expect them to be able to tell us. It would be very difficult for patients to discuss or for doctors to recognize a pain that has no place. Severe pain, evenly distributed throughout the body might be something very like depression. It is likely that some of the same brain mechanisms are involved in both pain and depression.

Our study has already provided some hints for treating depressed patients. The method which we have used here for gauging the quality of our patients' experience focuses attention on the patients' own views. When told by their patient that he would gladly suffer the loss of two arms and a leg to be rid of depression, the doctors responded "with amusement and disbelief, an indication of how little they understood the comprehensive pain of depression." (1). Two hundred years earlier when Samuel Johnson told his doctors that "I would suffer a limb to be amputated to recover my spirits," they sat and prayed with him. Amputation in the mid-18th century without anesthesia or antisepsis was far more dangerous and painful than it is today. Dr. Johnson's doctors understood how deep was his suffering: they knew how terrible an affliction melancholia could be. Many professionals who treat depressed patients have been surprised by our findings. It seems probable that with this illness, as with many others, those who have never themselves been seriously depressed underestimate the anguish of those who have. Asking patients to give us a view of their experiences can be very enlightening.

One difficulty resulting from the unlocal-izable nature of the pain found in depression is that the patient may neither be given or accept the sick role. The presence of severe pain is one way by which people gain access to the sick role and come to be perceived as patients. There are other ways, such as visible signs of illness or injury which alarm others but are not necessarily distressing to the afflicted person. It is possible to have a fatal injury or illness and to experience little or no pain, but generally speaking, the worse the illness, the worse the pain. (27). There are few outward and visible signs of depression. In recent times it has not been customary to discuss, describe, and measure depression in terms of pain, although it is, as we have shown, quite possible to do so. If depression is seen in terms of not only affective change, but also pain, then it should be easier to induct depressed people into the sick role and to get them and their families to accept both the illness and treat-ment. It should also become easier for all those working with the mentally ill to perceive their patients as having a serious illness. It should be easier for our patients to accept help once they realize that their misfortunes are taken seriously, because we know how greatly they suffer.

These findings also have implications for the treatments being used. Anti-depressant and pain medications may have more in common than we have previously realized. Both pain patients and depressed patients may benefit from explorations of the use of other substances with the same chemical structure as these medications. Our study showed that most patients preferred physical

pain to depression and some believed that death by suicide was preferable to living with depression. Patients may thus have better reasons for undergoing treatments considered drastic than has been credited to them. For example, one patient who had been fitted with a "brain pacemaker" which requires a relatively minor brain operation, stated that, "I'd have the pacemaker operation again because I am better than I was before." (28). Freeman and Kendall (29) studied patients' views of electroconvulsive therapy in treatment of depression and found that the patients viewed ECT as "a helpful treatment and not particularly frightening," in spite of some side effects such as memory impairment. Sixty percent of patients given electro-shock preferred this treatment to going to the dentist. Those who inveigh against ECT, brain surgery, and other drastic measures may simply have misunderstood the severity of the patients' suffering.

Our results show that the pain and suffering described in Johnson's prayer and Huxley's poem are still endured by a number of patients. It also seems apparent that they much prefer to undergo physical pain, perhaps because it can be localized, than to re-experience depression. Further study of this area is needed, so that we can, with our patients' help, gain a better understanding of the relationship of pain to depression. We need to ask questions of those with severe, intractable depression what they would be prepared to do to have their spirits restored. We need to prepare a questionnaire for families of depressed patients and those who work with them and the patients to discover what gaps lie between the patients' perceptions of their mood pain and the perceptions of those significant others. Much could also be gained by asking patients to give quantitative metaphors for various kinds of treatment they are willing to undergo, such as drugs, ECT, or surgery, and to give money amounts for their willingness to ensure the pain again. We must investigate the views of those in severe pain who have suffered previous depressions to determine the impact of the recency effect on their comparisons, and we must find out how pain perception interacts with temperament. Finally, we should obtain results of a wide range of psychological tests from both depressed patients and those with chronic pain to determine similarities and differences.

It seems likely that direct questioning of the kind we have described here may make it easier to determine which patients with mood pain find their condition unbearable and are considering suicide. Some of these patients are allowed to drift towards self destruction because they believe, not always mistakenly, that no one understands their suffering and that therefore their plight will not be taken seriously. Mood pain patients, like many other psychiatric patients, are not always inducted into the sick role, and thus do not get the great psychosocial support which is characteristic for this role. Even when medicine cannot do much to relieve suffering quickly, support given by the sick role prevents despair and maintains morale. Time is gained to seek other treatments and to reduce the chance of suicide.

In this paper we have begun to tap in a simple but systematic way our patients' own perceptions of and views about both physical and mood pain, and much still remains to be explored. We still have much to learn before we can give an affirmative and honest answer to that question implicit in the minister's remark which sowed the seed for this inquiry one third of a century ago, "Doctor, you don't have to ask that; you must know."

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