

Effect of Pain on quality of life:

Physical:

- Reduced functional capacity
- Diminished strength, endurance
- Nausea, poor appetite
- Disrupted sleep

Psychological*:

- Diminished enjoyment in leisure activities
- Increased anxiety, fear
- Depression, distress
- Difficulty concentrating
- Preoccupation with bodily sensations
- Loss of control

Social:

- Impaired relationships
- Reduced sexual function, affection
- Altered appearance
- Increased caregiver burden

Spiritual:

- Increased suffering
- Altered meaning
- Re-evaluation of religious beliefs

*World Health Organisation data has recently shown that 22% of primary care (GP) patients experience persisting pain (lasting more than 6 months) and these people are 4 times more likely to have an anxiety or depressive disorder than pain-free individuals.

Von Korff and Simon ([\[1\]](#)), in 1996, reviewed this problem and made 4 generalisations:

1. pain is as strongly associated with anxiety as with depression
2. the diffuse spread of pain and the extent to which it interferes with daily life predicts depression risk
3. common symptoms of depression in pain patients are: low energy, sleep disturbance and worry, but not guilt and loneliness which are also seen in pain-free patients psychological distress and disability tends to appear (and be resolved) early during the course of a pain disorder.

Dame Cicely Saunders, founder of the Hospice movement, described the phenomenon, 'Total Pain', which encompassed not only physical pain and other related symptoms, but also anger, depression and anxiety. In other words, the degree of suffering experienced is a composite phenomenon.

The meaning and context of pain is important. Williams and Thorn in 1989([\[2\]](#)) cited beliefs about cause, control, duration, outcome and blame as factors in the pain experience.

They developed a questionnaire measuring these beliefs (Pain Beliefs and Perception Inventory).

This led them to identify three dimensions: the first (temporal) dimension includes beliefs that pain is and will continue to be a constant feature of the patient's life (there is no end in sight); the second dimension involving beliefs that pain is a mysterious phenomenon that is poorly-understood by the patients themselves (but also healthcare personnel and family/friends); lastly the third (self-blame) dimension which includes beliefs that the pain is caused and maintained by the patient him/herself.

Later on the first dimension (temporal) was subdivided ([\[3\]](#)) into two parts, the first about the constant nature of the pain (ever-present) the second about its enduring nature, its permanence.

In arachnoiditis, the fact that the disease may well have been caused by a medical procedure, and the ensuing lack of compassion or help from doctors, can significantly add to the blame aspect and consequent anger.

There may also be an element of self-blame in having submitted to medical treatment that was later found to be more harmful than beneficial.

The lack of a cure and the intensity of neuropathic pain do of course mean that the temporal dimension assumes a great significance.

A Boston researcher and colleagues from Oxford University have looked at how the brain learns from pain experiences.

They have found that a part of the brain, the hippocampus, is involved with pain-related expectancy. Ploghaus spoke at the March 2002 Annual Scientific Meeting of the American Pain Society and described his theory that the experience of pain leads to learning which in turn affects the perception of pain on future occasions.

It appears that infrequent strong pain or surprise activates the hippocampus, which is also linked to emotional response to stimuli.

The primary function of the hippocampus is memory, but it is part of the limbic system, which affects emotionally driven behaviour, and also includes structures such as the thalamus (where pain information is processed) and the hypothalamus, which sends signals to the body to regulate a variety of bodily functions, especially via the pituitary gland, which secretes various hormones.

The limbic system involves the brain chemical dopamine, and the association of sensory input with specific mood states. This explains the close relationship between pain and emotions.

The unknown prognosis means that the outcome remains a mystery, and the incurable nature of the condition confers an endless duration to the pain being suffered.

The effect of arachnoiditis upon life expectancy is not really well established, although one paper has suggested an average reduction in life span of some 12 years. (Guyer [\[4\]](#)).

Thus there may be some lingering questions about the effects of the illness on mortality, which some authors have suggested affects the way in which we react to it. Lack of confirmed diagnosis means that accurate labelling of the illness may not be achieved and this is often a source of stress and distress.

Beliefs and expectations surrounding the illness also affect the way in which it impacts upon life as a whole. Whilst medical programmes on the TV have increased public awareness of some aspects of health, the layman may still rely upon folk wisdom in the absence of helpful discussion from his doctors.

These aspects have considerable bearing on the experience of arachnoiditis pain.

Pain has been described by the well-known psychologist Dr. Chris Eccleston as "a threat to personal identity"([\[5\]](#)). We shall be looking at the ways in which pain and suffering impact upon the individual as a whole, as well as their nearest and dearest.

The chronic pain cycle is another way of looking at the impact of psychosocial factors on the overall level of suffering.

These factors include previous experiences of pain and illness and the individual's personality as well as the illness experience which may include multiple hospital attendances, medical complications (including iatrogenic problems: i.e. caused by doctors).

The sequelae of these may include 'psychosocial distress' and a desire to seek alternative treatment. Should this fail, depression and possibly despair may set in and contribute significantly to the ongoing symptoms and persistent pain levels, which may in turn necessitate another turn on the circle of medical interventions.

The notion of 'psychogenic pain', in other words, pain generated in the mind, has caused considerable difficulties in situations where doctors have been unable to locate or identify a physical cause for a patient's symptoms: because the assumption has been made that there cannot therefore be a physical cause and logically only a psychological cause can be postulated.

In addition, the attendant stigma has meant that this sort of illness has been viewed as somehow less 'real' or worthy of medical attention.

However, we cannot throw the baby out with the bath water: as Melzack, well known in pain circles, and his colleague Casey remarked([\[6\]](#)):

"To consider only sensory features of pain, and ignore motivational and affective (mood) properties, is to look at only part of the problem, and not even the most important one at that."

In no situation is this more apt than that of chronic pain.

[1] Von Korff M, Simon G Br J Psychiatry Suppl 1996; 101-108 The relationship between pain and depression

[2] Williams, D.A.; Thorn, B.E. (1989). Pain, 36: 351-358. An empirical assessment of pain beliefs.

[3] Morley, S. and Wilkinson, L. (1995). Pain, 61: 427-433. The pain beliefs and perceptions inventory: a British replication.

[4] Guyer DW, Wiltse LL, Eskay ML, Guyer BH Spine 1989 Dec; 14(12): 1332-1341 The long range prognosis of arachnoiditis

[5] [Eccleston C, Williams AC, Rogers WS](#). Soc Sci Med. 1997 Sep; 45(5): 699-709. Patients' and professionals' understandings of the causes of chronic pain: blame, responsibility and identity protection.

[6] Melzack R, Casey KL The Skin Senses Springfield IL: Charles C Thomas, 1968, pp.423-443