



"Psychology Works" Fact Sheet: Acute Post-Surgical Pain

While the prospect of having surgery is fearful for many reasons, one of the most frequent concerns people have is that of pain after the surgery. How much will it hurt? For how long will it hurt? Will I be able to cope with the pain? What if I cannot bear the pain?

Psychologists help surgery patients come to terms with their fears about pain, they can help them cope with the pain itself, and can even help to reduce the intensity of the pain.

Pain is a private experience

Pain is a private experience that differs in important ways from other every day experiences. For example, the sights and sounds we encounter on a daily basis are part of the external world that others can also see and hear. No one else can ever feel another person's pain, no matter how close they are to them or how well they know them.

It is true we can use words and numbers to convey to others the intensity and quality of the pain we feel (e.g., burning, throbbing, aching) and many of our behaviours (e.g., limping, moaning) also indicate to others that we are in pain but, ultimately, pain is subjective and personal.

Psychologists have long been involved in the area of pain, both through clinical research and through direct patient care. Both research and clinical experience have taught that because it is a private experience, people suffering from pain may feel alone and misunderstood. Pain specialists agree that "pain is what the patient says it is".

Postsurgical pain

There are many different types of surgery. With few exceptions, all are painful. It used to be that postsurgical pain was very poorly managed and little or nothing was done to help with the pain. This was partly because pain was not well-understood by scientists and physicians. It was assumed that the pain would settle eventually and was just an inevitable part of having surgery. However, clinical studies found that recovery was faster and there were fewer complications when pain was treated aggressively after surgery.

Medications and techniques have been developed to provide much better pain control. Another reason for intense postsurgical pain was that patients were often reluctant to report pain to the doctor or nurse as they did not want to appear to be complainers.

Fortunately, this has become less of a problem since most hospital staff are now trained to routinely assess pain, in addition to other signs assessed after surgery such as pulse, temperature, and blood pressure. However, it is still important for patients to communicate openly about their pain, to ensure that staff is aware and can take steps to relieve it.



Most hospitals now have an Acute Pain Service (APS) consisting of a team of anesthesiologists and nurses whose main objective is to ensure that postoperative pain is properly managed through the use of powerful pain medications. Some hospitals also have a psychologist on the APS team.

The psychologist's role is to help determine the best pain management plan for each patient. Some patients become afraid, anxious or depressed after surgery which can affect the amount of pain they experience. By helping the patient deal with these problems the psychologist contributes to improved postoperative pain management.

What techniques or strategies are available to help control postoperative pain?

One of the most effective ways of managing postoperative pain is through the use of a Patient-Controlled Analgesia Pump System (PCA). When patients are moved to a recovery room after surgery they are typically connected to a PCA pump, which has a button that the individual can press to receive a dose of pain medication. There are appropriate safeguards built into the PCA system so that the right amount of medication is delivered when the button is pressed and it cannot be overused.

While it is obvious that the PCA is not a psychological treatment for postoperative pain, there are important psychological advantages to this method of managing pain. Most importantly, it provides control to the patient to take what is needed when it is needed as he or she is the best judge of their pain.

While PCA is a safe and effective means of managing postoperative pain, not all patients feel comfortable being placed in charge of their pain medication. They may be afraid of taking too much or too little pain medication, of the PCA system malfunctioning, or of becoming addicted. Once these fears and concerns are addressed and the safeguards are explained to them, most patients do very well with the PCA pump system and report a high level of satisfaction with their pain control.

How can psychologists help?

Psychologists help patients cope with postoperative pain through a variety of means. The process usually begins before there is any pain and even before the surgery itself. Providing accurate information ahead of time about the surgery and recovery gives the individual a realistic idea of what to expect during the hospital stay (for example, how much pain one is likely to experience), and can help to relieve anxiety and fear, both of which are known to make pain worse.

Understanding the factors that are associated with intense pain after surgery can be helpful in preventing or pre-empting postsurgical pain. Research studies have shown that providing information and education about pain and its management to patients can help reduce postsurgical pain intensity.

Psychological interventions that are specifically aimed at reducing pre-surgical anxiety have also been found to reduce postsurgical pain. Other 'tools' that psychologists use that have been shown to be effective in reducing postoperative pain intensity include hypnosis and self-hypnosis, relaxation training and cognitive behavioural therapy.



Psychologists are exploring new ways to improve postsurgical pain management. For example, studies have found that playing a tape-recorded message during surgery while the patient was under the effects of anaesthetic led to lower pain levels after surgery. The message contained positive suggestions for a pain-free recovery. While this type of approach is still in an experimental stage, it illustrates that new techniques can also make an impact.

Improvements in post-surgical pain management are still needed

Sometimes a person who is suffering from chronic pain requires surgery. The reason for surgery may or may not be related to the chronic pain problem. For example, a person with low-back pain or someone with chronic pelvic pain may need an operation to remove their gall bladder.

There has been very little research in this area but people who have chronic pain may be at risk for developing more intense acute pain after surgery than patients who do not have chronic pain. These patients may require extra care from the APS team in helping them manage the pain. In particular, psychologists can be helpful to these patients who are especially vulnerable and in need of support, encouragement and understanding.

You can consult with a registered psychologist to find out if psychological interventions might be of help to you. Provincial, territorial and some municipal associations of psychology often maintain referral services. For the names and coordinates of provincial and territorial associations of psychology, go to <http://www.cpa.ca/public/whatisapsychologist/PTassociations/>.

This fact sheet has been prepared for the Canadian Psychological Association by Drs. Joel Katz and Dean Tripp from York University and Queen's University, respectively.

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Your opinion matters! Please contact us with any questions or comments about any of the *Psychology Works* Fact Sheets: factsheets@cpa.ca

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