

# Placebos and Analgesia

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## ABSTRACT

Published on 31<sup>st</sup> December 2009

The pain relieving effect of placebos has been subject to much scientific study and endless debates. The psychosocial environment and the psychobiological responses are responsible for the perceived clinical relief. But the response to placebos has raised several ethical questions. No patient should be denied the real analgesics on this account. They should be informed when placebos are used.

This article describes the types of stress disorders and their clinical manifestations.

**Keywords:** Placebo effect, Psychosocial, Psychobiological, Placebo trials.

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The physician's belief in the treatment and the patient's faith in the physician exert a mutually reinforcing effect; the result is a powerful remedy that is almost guaranteed to produce an improvement and sometimes a cure."

A person's beliefs and hopes about a treatment, combined with their suggestibility, may have a significant biochemical effect. However sensory experience and thoughts can affect neurochemistry. The body's neurochemical system affects and is affected by other biochemical systems, including the hormonal and immune systems. Thus, it is consistent with current knowledge that a person's hopeful attitude and beliefs may be very important to their physical wellbeing. Doctors in one study successfully eliminated warts by painting them with a brightly colored, inert dye and promising patients the warts would be gone when the color wore off. In a study of asthmatics, researchers found that they could produce dilation of the airways by simply telling people they were inhaling a bronchodilator, even when they weren't. Patients suffering pain after wisdom-tooth extraction got just as much relief from a fake application of ultrasound as from a real one, so long as both patient and therapist thought the machine was on. Fifty-two percent of the colitis patients treated with placebo in 11 different trials reported feeling better — and 50 percent of the inflamed intestines actually looked better when assessed with a sigmoidoscope. It is unlikely that such effects are purely psychological.

The placebo effect is the effect that follows the administration of an inert treatment (the placebo), be it phar-

macological or not. It is important to understand that a placebo procedure simulates a therapy through the surrounding psychosocial context. Therefore, the study of the placebo effect is the study of the psychosocial context around the patient and its effects on the patient's brain. The real placebo response is a psychobiological phenomenon that can be due to different mechanisms, for example expectation and conditioning. Thus, there is not a single placebo effect but many, so that we have to look for different mechanisms in different conditions and in different systems and apparatuses. Today we are beginning to understand some of the neurobiological mechanisms of the placebo response, and this knowledge may help better understand the top-down control of the incoming sensory input, like pain, and the intricate interaction between mind and body.

The article on placebo analgesia details the methodology and the possible mechanisms of placebo analgesia. Apart from endogenous opioids, non opioid pathways and conditioning also have found to be playing their role in placebo analgesia. The use of placebos have reduced the use of analgesics in many situations especially post operative pain

But use and trials on placebos raise many unanswered questions

Single-dose, blinded, therapeutic placebo assessments do not adequately differentiate active drug responders from non-responders. Furthermore, those patients who respond well to placebo should not be denied some form of treatment. Therefore, there may be little role

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for blinded placebo assessments in pain management. Given the current state of our understanding of placebo, it might be better for patients with pain to be offered what is clinically judged to be appropriate analgesia, bearing in mind the large inter-individual variance in dose response. Continued treatment should be based on the balance of subjective benefit, impact on functioning, side effects, and risk, accepting that the benefits of the drug may not be solely pharmacological. It is understandable that clinicians working in this field should seek anxiously after certainty and 'science' in the face of ambiguity. The danger is that assessments with placebo medication offer only an illusion of certainty. The cost of this illusion is that patients may be denied beneficial treatment, and subject to possible denigration

The power of the placebo effect has led to an ethical dilemma. One should not deceive other people, but one should relieve the pain and suffering of one's patients. Should one use deception to benefit one's patients? Is it unethical for a doctor to knowingly prescribe a placebo

without informing the patient? If informing the patient reduces the effectiveness of the placebo, is some sort of deception warranted in order to benefit the patient?

Patients can become dependent on nonscientific practitioners who employ placebo therapies. In other words, the placebo can be an open door to quackery. Will placebos wait till the questions are answered?

## END NOTE

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**Conflict of Interest:** None declared

**Cite this article as:** Jayakrishnan A V. Placebos and Analgesia. Kerala Medical Journal. 2009 Dec 31;2(4):99-100