



Stress and Patients' Ability to Comply with or Adhere to Treatment Regimens

Compliance and adherence are two terms with high relevance to the success of any treatment. While the first connotes a passive patient following the advice and directions of the health care provider, the second implies an active voluntary collaborative health treatment plan that incorporates the patient's beliefs and attitudes.

Assuring that patients comply with and/or adhere to a prescribed treatment regimen requires more than providing a clear presentation of the relevant information. The patient's understanding of the information is crucial for achieving the patient's cooperation in treatment. Waisman et al¹ showed that about 20% of parents fail to completely comprehend the diagnosis or treatment directives given to them when their children are discharged from an emergency department. As well, 40% of patients who have minor oral surgical procedures do not remember receiving both written and verbal instructions. Thus, many do not comply with postoperative instructions (eg, 67% did not comply with antibiotic prescriptions).²

It is well documented that stress significantly affects an individual's cognitive ability to process information.³⁻⁵ A growing body of literature deals with the topics of stress and information in the medical field, mainly with regard to the effect of preoperative information on reducing anxiety and stress during surgery⁶ or increasing the patient's knowledge of operative procedures for the purpose of ensuring informed consent.⁷

Stress is a general term that has changed in meaning over the past decades. It is both a stimulus and a reaction, and it includes both physiological and psychological components. One of the most potent forms of stress is pain. The pain experience includes actual confrontation with harm, which can be physical (eg, injury), psychological (eg, loss of control, depression), or interpersonal (eg, shame). As such, it is affected by both the potency of the stimulus and by the individual's ability to cope with the stressful event.⁸

One study on the effect of preoperative stress showed that patients facing oral surgical procedures present a low ability to process clinically relevant information supplied to them immediately prior to treatment.⁹ In another study, the ability of dental patients to process supplied information was less than 50%. Anxiety and expectation to experience pain had a profound effect on the patients' ability to correctly recognize provided information.¹⁰

Seeking medical help for pain is a common situation in which a patient would need to process crucial information under stress. Acute pain is a potent stressor that often requires an immediate medical intervention (eg, acute dental pain). In such a situation, it is not uncommon for clinicians to supply information regarding treatment immediately before, even sometimes during, the procedure. Even if supplied before or during a procedure regarded as simple, this information may nevertheless present substantial stress to the patient and impair his or her ability to process it (eg, explaining to the patient a change in the treatment plan due to unexpected pulp exposure during a restorative procedure).

Chronic pain, a different sort of stressor, is often associated with negative mood changes and/or increased irritability. Going to a health care provider is a stressful experience in its own right for many patients. During such stressful medical and dental encounters, the patient's ability to process relevant information may be severely impaired. Unfortunately, health care providers often supply patients with information about their condition, or a suggested treatment, without taking into account the patient's emotional status. Even when patients confirm that they properly comprehend the supplied information, this perception may be unreliable.¹⁰

Addressing chronic pain often requires patients to make long-term behavioral changes, such as taking medications for a substantial time, using oral appliances, performing relaxation exercises, and avoiding contraindicated behaviors. The patient's adherence to an outlined treatment regimen is essential for the treatment success. To achieve this goal, it is important that the patient's potential stress is taken into account whenever relevant information is supplied. If possible, specific questions should be posed to assure that information was actually perceived and processed. Written instructions, which can later be used for recall purposes, are recommended.

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