



Communication between Health Care Professionals and Chronic Pain Patients Time to change the “Pain Game”

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Patient satisfaction is currently used as a comparative measure to evaluate the quality of health care programs. This seems the best way to evaluate results although an important discordance might exist between patient’s perception and doctor’s opinion regarding satisfactory outcome after surgery, including that after joint replacement. Pain remains a major cause of dissatisfaction for many patients. To understand the meaning of pain, i.e. “why does pain hurt” in some patients but not in other ones, and to decipher patient’s pain expression is a key feature of patient-doctor communication. Questionnaires based on patient’s personality traits (integrated and comprehensive reflection of psychological traits) are still underused but might help the doctors to get closer to their patients and understand them better. Besides the source of the relationship, dysfunction should not be attributed only to the person with pain, as the lack of doctors’ training to capture and understand the psycho-social dimensions of pain can be pointed out too. Failure to address the psycho-social dimensions of patient’s pain and suffering, a skill which relies on patients-doctor communication, represents a major socio-economic problem as it may negatively impact postoperative outcome both in terms of poor management of treatment failure and in term of poor prediction of surgical outcome.

Keywords :

INTRODUCTION

Pain is a major reason for patients to seek medical advice. That is particularly true in the field of orthopedic surgery where most of the patients undergo surgery to relieve their pain. However persistent post-surgical pain (PPSP) concerns a non-negligible number of patients after major orthopedic procedures, including joint replacement. Chronic pain may be more or less severe, may have more or less impact on the patient’s daily life and most of the time exists as a major cause of dissatisfaction (16).

Medical practice is going through a continuous evolution because of better understanding of the human physiopathology and thanks to new technical developments. The personal involvement of patients in their own health and outcome has also

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changed. The success of a treatment is today evaluated in terms of impact on the quality of life, which assessment is increasingly incorporated into both clinical research and routine practice. Patient Reported Outcome Measures (PROMs) help to assess the surgical experience from the patient's perspective (4) and patient satisfaction is now being used as a comparative measure to evaluate the quality of treatments. However, the concordance between patients' perception and the health-care providers' opinion remains sometimes far from optimal. For example, the discrepancy between patient's and surgeon's satisfaction in relation to the outcome of arthroplasty, e.g. knee replacement, is well known but poorly understood (12). A subset of patients report suboptimal results that can't be explained by patients' physical characteristics or surgical technique but seem to be influenced by patients' own psychological factors. It is obvious that medical expertise or competence alone does not account for a positive outcome and that the non-specific effects of the patient-doctor relationship should not be underestimated in the success of treatment (17). In other words, communication plays a major role in treatment outcome, and specifically in case of suboptimal outcome. Very few studies have dealt with treatment failure and investigated the patient experience of an unsuccessful medical intervention (14). In contrast with the extensive training doctors receive in their own area of expertise, their ability to deal effectively with difficult patients, to address patient's negative emotions and to decipher both verbal and non-verbal emotional messages is limited. Doctors have to rely on their individual' sensibility and skills to establish relationship with the suffering patient (17).

The meaning of pain : the confrontation of two subjective opinions or the "Pain Game"

In a perfect world, a patient's brain is filled with realistic expectations, true beliefs, trust and hope and the doctor's brain with altruism, compassion, sympathy and empathy (3). Clinical reality is often very different, particularly when pain is present. Pain patients can be difficult i.e. angry, mistrustful, desperate and doctors react to them with negative

feelings i.e. suspicion, distrust, resentment, dislike (6). The resulting therapeutic dialogue is a mutually frustrating interaction called the "*pain game*", reduced to its simplest form it goes as follows (23) : A patient in obvious distress, talks to the doctor : It hurts, please fix me. Provider with obvious confidence says : I will fix you, no problem. However when they meet up again after the surgery their role-play changed. The patient thinks with indignation : "another incompetent quack". While the provider reflects defensively : "another lunatic crock". At that point, the patient will look for and find another health-care provider and the process is repeated.

That type of negative communication has been particularly studied in low back pain situations and Failed Back Surgery Syndrome leading to the pertinent question : "Failed back surgery syndrome : who has failed ?" (1). Nevertheless, it may apply to many other clinical situations and a better understanding of patient-doctor communication clues, both non-verbal and verbal language, might not only help to deal with treatments' failure but perhaps more importantly might help to predict patients at risk for poor outcome after elective surgical procedures.

The present narrative review focuses on patient-doctor communication, patient's pain expression, the meaning of their cry for help as well as the doctor reaction to patient' suffering.

Expression and meaning of pain on the patient' side : "Doctor, why does my pain hurt ?"

Patients with similar diagnosis and similar treatments may respond in radically different ways. How to explain such unpredictability in outcome ? The answer, a difficult challenge, relies on the subjective, singular and unique, conscious experience of pain, i.e. the "hurting" of pain (6).

By definition, pain is an "unpleasant sensory and emotional experience". Pain is complex and multi-dimensional. The etymology of the word is revealing as "*poena*" meaning penalty, punishment, suffering and pain. Guilt which is usually a precondition for punishment, grief and personal loss may also be associated to the pain experience. Acute pain raises natural fear and anxiety about its cause and possible

future consequences. As pain becomes chronic, what almost inevitably implies failed conservative treatments creating the expectation that joint arthroplasty is the ultimate solution for osteoarthritis, the emotions associated with pain change in nature and intensity (21). Besides the sensory-discriminative dimension, the affective dimension of pain involves two different stages: the immediate appraisal and emotional feelings associated with the sensory features of pain (unpleasantness, distress... closely linked to pain intensity and arousal) and the second stage associated to longer-term implications of having pain which relates to memories and imagination (21). In other words, the immediate affective stage is based on present and short-term future while the secondary stage is based on the past and long-term future.

Pain is a subjective experience and people are predisposed to react in variable ways when in pain according to biological, psychological and social determinants of pain (9). The relations between mental and physical states (i.e. mind-body interactions) cannot be denied (7,24). Life history has also a potent impact as socialization in unique familial and ethnic environments determines the meaning and affective understandings of pain.

Increasing attention has been paid, with more or less success, to various psychological determinants, mainly those with negative connotations (anxiety, depression, negative mood, catastrophizing) as predictive values for treatment outcomes. *Anxious (as trait-component) and depressive states* exacerbate pain and have been found to be predictive for chronic post-surgical pain after musculoskeletal surgery but not for other types of surgery (e.g. urologic, gynecologic, chest surgery) (24). Because of frequent co-occurrence, depression and anxiety may represent overlapping constructs and may be characterized by the term "negative affect" (dysphoric mood of depression). Negative affect, in contrast to positive affect i.e. joy, enthusiasm and energy, seems more predictive of long-term pain interference and pain-related disability after major procedures like spine surgery (22). It is also interesting to stress the well-known relationship between anger, anxiety and depression. *Anger* is an integral part of the pain experience, often reported as an aversive emotional

state which overt expression ranges from irony, mild irritation to fury (25). Anger is associated with adverse outcomes like higher pain intensity in various situations ranging from acute postoperative pain to chronic pain conditions (fibromyalgia, back pain...) and poor functional outcome. Cognitive dimensions of anger construct in chronic pain include frustration, external attribution for negative outcome (blame) and perceived injustice. Although blame may facilitate coping with pain, patients who blame others for their pain report more pain and emotional distress than those who do not ascribe fault to someone for their pain condition (11). Anger expression always impairs communication and establishment of working alliances between the angry patient and the health-care provider. *Catastrophizing* is a negative cognitive and affective response to pain. This multidimensional construct incorporates elements of rumination (inability to inhibit pain-related thoughts and fears), magnification (amplification of pain) and helplessness (despair regarding inability to control one's pain experience) (5,13,20). Catastrophizing emerges as a trait-component as it remains unaltered over time after surgery even when pain intensity decreases (13). Furthermore, pain magnification, one of the dimensions of catastrophizing, arises as an independent predictor of chronic pain intensity after surgery whatsoever the type of procedure (20). It is worth noting that the aforementioned pain-related symptoms classified under "psychologic" category exert biologic effects that may account for some of their negative consequences. Catastrophizing provokes higher activation of systemic inflammatory processes (7) and both catastrophizing and depression are associated with less effective endogenous pain inhibitory processes (19).

"*Personality*" as a more integrated and comprehensive reflection of stable psychological states of a person has received little interest to date in perioperative context. Personality traits exert their effects on the second stage of pain affect, i.e. on longer-term implications of having pain, the first stage (sensory discrimination or pain intensity) being usually not really affected (21). A recent retrospective study has assessed how patient's personality traits might predict recovery after knee

Table I. — Personality traits as predictors of patient's outcome after total knee arthroplasty (from Gong L. & Gong J-Y. J Orthop Sci 2014; 19: 263-9)

Neurotic subscale scores	Introversion subscale scores	Personality trait	Knee arthroplasty outcome*
Stable	Introverted	<i>Phlegmatic</i> (controlled, calm)	Moderate functional outcome
	Extroverted	<i>Sanguine</i> (sociable, talkative)	Best functional outcome Better recovery
Unstable	Introverted	<i>Melancholic</i> (neurotic, depressive, anxious)	Worst functional outcome
	Extroverted	<i>Choleric</i> (aggressive, impulsive, touchy)	Lowest satisfaction score Moderate functional outcome

Neurotic scale measures emotional instability; extraversion/introversion scale measures sociability and liveliness.

(*) Outcome has been assessed by using SF-36 health survey and WOMAC index (function, pain, stiffness).

arthroplasty (15). The authors have used the Eysenk Personality Questionnaire (EPQ) as a comprehensive and broader measuring instrument to evaluate the influence of psychological determinants on surgical results. EPQ allows categorizing four personality types: extroverted (positive emotions like sociability, liveliness), neurotic (emotional instability and anxiousness, predisposition to maladaptive behavior), psychotic (tough-mindedness, aggressive, cold, egocentric) and lying (unsophisticated dissimulation). According to the levels of extroverted/introverted (measured by introversion subscale scores) and stable/unstable (measured by neurotic subscale scores), the authors have divided patients into four personality types: choleric, sanguine, melancholic and phlegmatic. The impacts of patient's personality traits on knee arthroplasty outcome are summarized in Table I (15).

Apart from depression, individual emotions rarely reach the level of psychiatric illness (back pain revolution). Beside the aforementioned combinations of emotions and related behaviors associated with pain expression, there can be different meanings to pain that the patient may not be aware of and the health-care provider either (18).

Denial and somatization

Several chronic pain patients may be unaware of their emotional state (alexithymia) and more prone to experience physical symptoms like pain or dysfunction in place of psychological symptoms.

Chronic pain patients often deny feelings such as depression or anger, reporting pain instead of the emotional state responsible for the pain. They also experience emotional distress through physical symptoms (somatization) and not only fool themselves into the conviction that their pain is physical but often fool their care providers as well.

Identification

Chronic pain begets chronic pain. Many chronic pain sufferers have a close relative who is or was disabled with some chronic pain. Unconsciously, the patient maintains a link with that person through his/her pain. Identification may also express the pain of separation of a beloved relative.

Repression

By this defense mechanism, the bitter feelings of the patient toward a close relative, unacceptable ideas or impulses, are repressed and kept outside the conscious awareness. The repressed feelings (e.g. anger) are disguised and re-directed at another authority figure in place of the relative (e.g. health-care provider).

The caregiver's perspective

In any form of communication, the observer and the observed are interdependent. There is not one simple reality but multiple realities underlying the

complexity of the relationship. Subjectivity is the singularity of each person, a personal way of being. Understanding the nature of pain depends on recognizing not only the subjectivity of the sufferer but also that of the health-care provider who carries his/her own experiences (6).

Pain, specifically persistent pain, is associated with negative social information and stigmatization, although the major reasons for it remain unclear. Thereby, common beliefs attribute the source of relationship dysfunction to the person with pain. Persons with pain consistently report that others evaluate them negatively what is supported by the medical literature. Pain behaviors alone are sufficient to elicit a negative social response as subjects who display such behaviors are perceived as less sympathetic and in a more negative mood (2). Estimation of pain intensity by the health-care providers is also crucial for pain management. Variables which affect pain estimation are sufferer's expression of his/her pain and physical attractiveness, as well as observer's experience with his/her own pain and pain in others. Patients who are associated with negative personal traits are considered as less likable. Those patients induce lower pain estimations and lower perceptual sensitivity toward pain (i.e. lower ability to discriminate between various levels of pain intensity and expression). Patient's likability seems only relevant in case of high intensity pain expression (10). In addition, contextual factors such as medical evidence for the pain and pain duration greatly affect pain estimation. The biomedical model that presumes that pain is caused by physiological pathology is still the most influential regarding patient care. Absence of medical evidence is related to less positive evaluation of the patient and higher deceptive feelings in health-care professionals (10). In the absence of clear biomedical basis, pain is perceived as of lower intensity and associated with less interference on the daily quality of life. Consequently, as the observers or caregivers feel less empathy and sympathy, they are also less inclined to help the patient when a medical explanation for the pain is absent. In turn, patients perceive the behavior of health-care providers as an injustice. The consequences on the relationship are disastrous and usually promote negative clinical outcome.

CONCLUSION

Accepting patient's subjectivity may enhance doctors' ability to answer the patient's fundamental question: "Doctor, why does my pain hurt?" The source of dysfunction and misunderstanding does not totally rely on the person with pain. Although increasing attention has been given to pain in medical education, the actual standard approach based on physiological mechanisms poorly prepares trainees to assess, to deal with and to treat pain patients in everyday clinical practice (8). The psycho-social dimensions of pain contribute to the multidimensional experience of pain nearly as much as does nociception per se. Failure to address the psycho-social dimensions of patient's pain and suffering, a skill which relies on patients-doctor communication, may negatively impact postoperative outcome both in term of poor management of treatment failure and in term of poor prediction of surgical outcome.

Based on Hippocrate's observations, the principle applied by William Osler is still true: "It is more important to know what kind of a person has a disease than what kind of disease a person has".

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