

Pain as the Fifth Vital Sign

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The experience of pain is complex, involving, emotional and cognitive components. Pain is subjective and highly individualized. Carr and Coudas describe pain as the normal, predicted physiological response to an adverse chemical, thermal or mechanical stimuli associated with surgery, trauma or an acute illness & thus characterize it as a sensory response.

The International Association for the Study of Pain (IASP) defines pain as an unpleasant sensory & emotional experience associated with actual or potential tissue damage. According to Katz & Melzack, pain is a personal and subjective experience that can only be felt by the sufferer. This view is also supported by McCaffery's definition in which pain is whatever the experiencing person says it is & exists whenever he/she says it does.

Types of Pain

There are various types of pain.

- * **Acute pain** is of recent onset & short duration and is usually associated with an injury to the body. The pain is described as sharp test or pricking & is localized to a particular area. Acute pain subsides as healing occurs.
- * **Chronic pain** is prolonged, lasting for months or more.
- * **Cutaneous (Superficial pain)** is characterized by an abrupt onset & a sharp stinging quality depending on the type of nerve fiber

involved. It tends to be localized.

- * **Deep somatic pain** is poorly localized, may produce nausea, & may be associated with sweating & blood pressure changes.

- * **Visceral pain** refers to pain coming from body organ. This pain tends to be diffuse, poorly localized, vague and dull. Often visceral pain is manifested as sweating, restlessness, nausea, pallor & agitation.

- * **Referred pain** is felt at an area distant from the side of the stimulus. It occurs when nerve fibers serving an area of the body distant from the site of the stimulus pass in close proximity to the stimulus. The referred pain sensation may be intense, and may be little or no pain at the point of noxious stimuli.

- * **Neuropathic pain** is caused by damage or injury to nerve fibers in the periphery or by damage to the central nervous system.

- * **Phantom pain** is felt in a body part that is no longer present such as amputated foot. It is thought that stimulation of a severed dendrite rather than the stimulation of usual receptors causes the individual to perceive the pain in the removed part.

Despite substantial advances in the knowledge of acute pain mechanisms and in its treatment, acute pain is generally not effectively treated. The reasons for inadequate pain management are:

- * Inadequate knowledge of health team members.
- * Inadequate assessment in rest and moving.
- * Lack of communication between staff and patients.
- * Divergent attitudes.
- * Absence of systematic recordings.
- * Lack of public awareness on pain management.
- * The common idea that pain is merely a symptom and not harmful in itself.
- * The mistaken impression that analgesic makes accurate diagnosis difficult or impossible.
- * Fear of the potential risk for addiction to opioids.
- * Concerns about respiratory depression and other opioid-related side effects such as nausea and vomiting.
- * Lack of appreciation of variability in analgesic response to opioids.
- * Prescriptions for opioids include the use of inappropriate doses and dose intervals.
- * Thinking that patient weight is the best predictor of opioid requirement and that opioids must not be given more than 4 hourly.
- * Patients difficulties in communicating their need for analgesia.

A patient's reaction to pain is intensively personal and accounts for the great variability in pain experience from person to person. Numerous factors like physiological, psychological, socio-cultural and personal beliefs may contribute to this variability from nociception to transmission. The

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brain is the ultimate interpreter and modulator of the pain experience.

Poorly controlled pain has negative physiological and psychological consequences. Pain increases the risk of atelectasis and impaired respiratory function. It causes intensified stress hormone responses, increased metabolic rate, increased blood clotting, water retention and impaired body function. Research clearly shows that unrelieved pain can slow recovery, create burden for patients & their families and increase the cost of health care. Unless severity of pain is assessed on regular basis it cannot be effectively treated. Assessment of pain is a precursor of clinical decisions regarding analgesic requirements.

Post-operative Pain Management

Post-operative pain management has been a core nursing responsibility. Optimal management of acute postoperative pain requires planning, patients and staff education and tailoring to the type of surgery and the need of the individual patient. According to the Joint Commission on Accreditation of Health Care Organizations (JCAHO) standards, related to postoperative pain management are as follows:

- * Recognize patients' rights to appropriate assessment of pain.
- * Screen for pain and assess the nature and intensity of pain in all patients.
- * Record assessment results in a way that allows regular reassessment and follow-up.
- * Determine and ensure that staff is competent in assessing and managing pain.
- * Address pain assessment and management when ori-

enting new clinical staff.

- * Establish policies and procedures that support appropriate prescribing of pain medications.
- * Ensure that pain doesn't interfere with patient's participation in rehabilitation.
- * Educate patients and their families about effective pain management.
- * Address patient's needs for symptom management in the discharge planning process.
- * Establish a way to collect facility-wide data to monitor the appropriateness and effectiveness of the pain management.

These standards provide an excellent opportunity for improving the management of patient's pain.

Accurate assessment of pain is necessary for quality pain management. Pain intensity must be assessed and reassessed frequently and documented in the bedside chart to "make pain visible". It should become a routine nursing assessment, which is fundamental to many nursing care situations.

Assessing Pain

There are many scales available to assess pain. The Visual Analogues Scale (VAS), the Verbal Rating Scale (VRS), the Pain-O-Meter, McGill Pain Questionnaire (MPQ), the Faces Rating Scale and the Numerical Rating Scale. The more commonly used scale is the numerical rating scale (NRS), which has 0-10 points, with 0 as no pain to 10 as bad as it could be. It provides simply to ask the patients to rate the intensity of this pain of zero as no pain to 10 worst pain possible. Patients select a number reflecting their perception to the degree of pain intensity. This scale

is found to be reliable and easy to use.

The purpose of pain assessment are:

- * To provide a basis for intervention.
- * To judge the progress of patients.
- * To assess the impact and efficacy of treatment.
- * To help in arriving at a proper diagnosis.

Enhancing Pain Control

The following are the few guidelines available to enhance pain control.

- * A collaborative, interdisciplinary approach to pain control, including all members of the health care team & inputs from the patient and the family members when appropriate. An individualized proactive pain control plan developed will be easier to prevent than treat pain.
- * Assessment and frequent reassessment of the patient's pain
- * Use of both dry and non-dry therapies to control and prevent pain.
- * A formal, institutional approach, with clear lines of responsibility.

The above guidelines emphasize that assessment and reassessment of pain is necessary to control patient's pain accurately.

Systematic assessment and documentation of patient's pain is the foundation for all subsequent decisions concerning intervention strategies. Thus one of the most important changes in the progress of improving the efficacy of pain treatment is to introduce pain assessment as the fifth vital sign in addition to the traditional four vital signs (temperature, pulse, blood pressure & respiration). Vital signs are moni-

tored in order to detect changes or trends that signal a need for further assessment, diagnosis & treatment. Making pain a vital sign along with other vital signs, would ensure that pain is monitored on a regular basis. The American Pain Society (APS) recommends that pain be treated as the fifth vital sign. If pain were assessed like other vital signs, there would be a much better chance of it being treated properly.

Conclusion

The pain experience is multifaceted in that it encompasses an individual's physical, emotional cognitive and experiential realms. The uniqueness of each patient explains the distinctiveness of each one's response to pain and provides the rationale for customized care plan. Pain management is patient's right. As nurses, we must make a conscious commitment to this right.

Introduction of the fifth vital sign would solve many problems in pain therapy, because health care members take vital signs very seriously both for monitoring and treatment. Frequent measurement and documentation of pain intensity and organization of teams for treatment of acute pain would be more efficient & will enhance more quality pain management to all patients.

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