

FACULTY OF NURSING



PAIN AND ITS MANAGEMENT

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Introduction

• Pain motivates us to withdraw from potentially damaging situations, protect a damaged body part while it heals, and avoid those situations in the future. Most pain resolves promptly once the painful stimulus is removed and the body has healed, but sometimes pain persists despite removal of the stimulus and apparent healing of the body; and sometimes pain arises in the absence of any detectable stimulus, damage or disease

Definition

• Pain is "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."

- IASP

Dimensions

- Affective Emotions, Sufferings
- Physiologic Transmission of nociceptive pain
- Sensory- pain perception
- Cognitive- Beliefs, Attitude
- Behavioral responses.

Clinical Terms For The Sensory Disturbances Associated With Pain

- <u>Dysesthesia</u> An unpleasant abnormal sensation, whether spontaneous or evoked.
- Allodynia Pain due to a stimulus which does not normally provoke pain, such as pain caused by light touch to the skin

- <u>Hyperalgesia</u> An increased response to a stimulus which is normally painful
- <u>Hyperesthesia</u> Increased sensitivity to stimulation, excluding the special senses. Hyperesthesia includes both allodynia and hyperalgesia, but the more specific terms should be used wherever they are applicable.

Classification

- Physiological
 - Nociceptive
 - Neuropathic
 - psychological
- Clinical
 - -Acute
 - Chronic
 - malignant

Nociceptive pain

It is caused by damage to somatic or visceral tissue.

- somatic pain
- visceral pain

Ex: surgical incision, Broken bone.

Neuropathic pain

it is caused by damage to nerve cells or changes in spinal cord processing.

Ex. Shooting, stabbing etc.

Types:

Deafferentation pain: injury to either PNS or CNS.

Sympathetically maintained pain:
Asso. With dysregulation of ANS

Peripherally Generated pain

Psychogenic

Psychogenic pain, also called *psychalgia* or *somatoform pain*, is pain caused, increased, or prolonged by mental, emotional, or behavioral factors. Headache, back pain, and stomach pain are sometimes diagnosed as psychogenic

PATHOPHYSIOLOGY

• Pain:

Involves four physiological processes:

- Transduction
- Transmission
- Modulation
- Perception

Noxious stimulus



NSAIDS release of inflammatory substances (PG, Hst, Sr., Bdks, Sub.P)

Tansduction
(generation & electrical impulses)

Transmission (conduction by nerve fibers)

Opioids---- Modulation
(Modification w th spinal corel)

Opioids---- Perception

Pain Assessment

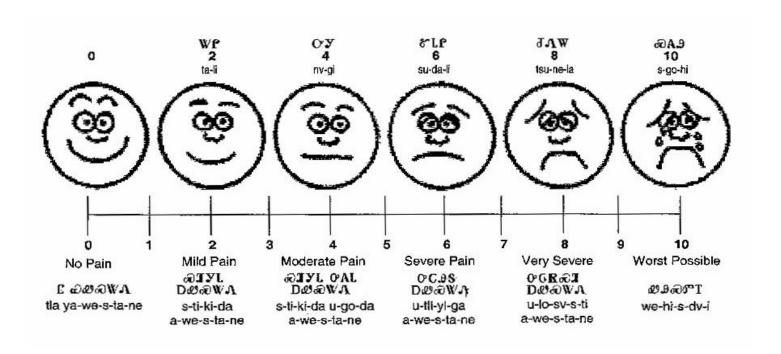
• Sensory component:

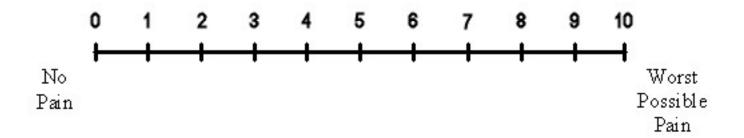
Pattern of pain.

Area of pain.

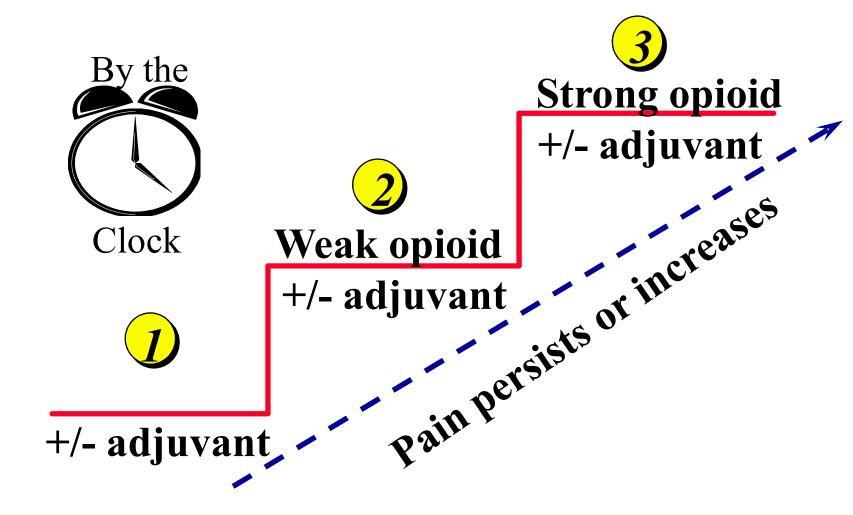
Intensity of pain.

Nature of pain.





Pain Ladder



Drug therapy

- Non opioid analgesics for mild pain. Aspirin, Salicylates, NSAIDS.
- Opioid analgesics for mild to moderate pain
 Morphine, Hydromorphine, Methadone,
 Fentanyl, Pentazocine.
- Adjuvant analgesics

Antidepressants, Antiseizure agents, Corticosteriods, Alpha 2 adrenergic blockers.

Physical Therapy

- Massage
- Vibration
- TENS
- PENS
- Acupuncture
- Heat therapy or Cold therapy
- Exercise

Cognitive Therapy

- Distraction
- Hypnosis
- Relaxation

SURGICAL THERAPY

Nerve block