Need for more Clinical Training for Improving the Fifth Vital Signs Assessment Skill of Oncology Nurses

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Abstract

Pain is a subjective feeling, and there are no physical tools or instruments available to measure pain. Pain assessment in the clinical setting is a crucial step in the management of pain in inpatient as well as outpatients setting. Pain is accepted as a fifth vital sign in the healthcare setting, like other vital signs, pain can not be measured by any instrument because of a subjective nature as other vital signs are objective in nature. Adequate and accurate assessment and documentation, and thereupon management of pain ensures that each and every patient, from acute to chronic illnesses including terminal ill patients, hasbenefitted from efficacious pain-relieving measures. It has been estimated that 18 million people globally have cancer pain, and in that proportion, approximately 60% to 90% of the pain is caused by advanced tumors and 30% caused by mild and/or moderate tumors that can be treated by medical surgical or other therapy. Pain is classified as nociceptive and neuropathic based on the fundamental pathophysiology of pain. Assessment of pain can be done in three ways, Self-report, Behavioural how the patient behaves, and Physiological clinical observations.

Conclusion: Pain is a worldwide health issue. Pain assessment & Management requires the attention of health professionals. Pain is one of the most common under evaluated vital signs in the health care sector. Under evaluation causes, discomfort to the patient as well as psychiatric problems, Better evaluation of pain stimulates good therapeutic management of it which improves the quality of life among patients pain assessment & management is complex, there are varieties of factors that affect pain assessment and management services thus a deeper understanding of the barriers and overcoming to this barrieris required for proper and effective pain management services.

Keywords: Pain Assessment; Pain; Pain management; Fifth Vital Sign.

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INTRODUCTION

Pain is a subjective feeling, and there are no physical tools or instruments available to measure pain. Pain is whatever they felt by individuals, say it as like as felt by them, and where ever they experience pain.[1] Pain assessment in the clinical setting is a crucial step in the management of pain in inpatient as well as outpatients setting. In the health care sector, nurses have a notable role and responsibility in the assessment of pain, undoubtedly nurses perform it better because they have more association with the patients as well as

their families in the hospital as well as community.[2]

Pain is accepted as a fifth vital sign in the healthcare setting, like other vital signs, pain can not be measured by any instrument because of a subjective nature as other vital signs are objective in nature. Adequate and accurate assessment and documentation, and thereupon management of pain ensures that each and every patient, from acute to chronic illnesses including terminal ill patients, has benefitted from efficacious pain-relieving measures.[3]

CANCER AND PAIN

Pain is a usual symptom in patients diagnosed with any type of cancer patients. There are no doubts that it is usually a feared symptom, and thought to be linked with distress and inability. It has been estimated that 18 million people globally have cancer pain, and in that proportion, approximately 60% to 90% of the pain is caused by advanced tumors and 30% caused by mild and/or moderate tumors that can be treated by medical surgical or other therapy.[3]

As per who data, Cancers are the major cause of morbidity and mortality globally, accounting for 18.1 million new occurrences and 9.6 million deaths in 2018. It is a remarkably raising burden on patients as well as families, communities, and health services.

Pain is encountered by 55% of patients receiving anti-cancer treatment such as chemotherapy, radiation therapy, or surgery and 66% of patients diagnosed with an advanced, metastatic, or terminal disease experience pain.

Cancer pain is mainly caused by the growth of tumors or destroying nearby tissue, press on nerves, bones, or organs, and chemicals released from tumors. Another cause of pain in cancer patients is oncological treatments, such as surgery, radiation, chemotherapy, and various diagnostic as well as a therapeutic procedure such as biopsy, frequent iv cannulation, and major or minor surgical procedures.

The pain felt by cancer is generally round o clock in nature. The quality of life of amay be improved by better management of pain. Better pain management can improve better sleepingat night which makes them more energetic during the day. Improving activity may also decrease the risk of ailments such as pneumonia, pressure soreness, blood clots, and various type of infections, which are linked to immobilization of patients due to pain.

The basics of pain management in an oncology setup are regular medication, including antipyretics (acetaminophen) and opioid drugs. Appropriate selection of drug ensure the safety of patients and minimize side effects of the drug.

TYPES OF PAIN

Pain is classified as nociceptive and neuropathic based on the fundamental pathophysiology of pain.

The Nociceptive pain transmits from nociceptor response to noxious stimuli, that may be found in thesuperficial tissues, or in the deep tissues (Called somatic pain). It may also occur in the visceral organs (Called visceral Pain). Superficial somatic pain is produced by external factors which may be the mechanical cause, chemical cause, or thermal cause such as surgery, burns, abrasions, cuts, contusions, injections, or dermatological problems causing injury. Deep somatic pain may be stimulated by mechanical injury, inflammation, or ischemia. When the pain occurs in the visceral organ called visceral pain. Some examples of visceral pain in oncology include cancer of gastrointestinal organs such as the stomach, gall bladder, intestine liver, genitourinary cancer, cancer of the bladder, ureter, prostate, and inner genital organ.

Neuropathic pain is also known as pathologic pain, this type of pain may be caused by injury and impairment of the central (Brain & Spinal cord) or Peripherally distributed nerves (peripheral nervous systems). This produces abnormal pain stimulus which can cause diffuse pain, this characteristic makesit difficult to recognize the source such as diabetic neuropathy, neuralgia, phantom limb pain, post-stroke, or autoimmune disorders.

Based on duration, Pain is classified as acute or chronic

Acute pain – It comes suddenly and is generally sharp in nature, it is mostly caused by a specific factor, pain caused by diagnostic and therapeutics in the oncology sector are an example of acute pain. Acute pains last less than 3 months to 6 months.

Chronic pain persists beyond the expected course of acute pain. Chronic pain disrupts the work pattern of the individual as well as activities of daily living and sleeping quality. Identification of fundamental pathophysiology presence and/orextent of chronic pain is a difficult task for healthcare personnel. There are some other factors such as psychological that are not associated with the cause of pain but affect the nature of pain. Chronic pain may exist without physiologic signs and it can be continuous

orperiodic, with or without acute exacerbations. When an acute pain episode comes from achronic disorder, called "breakthrough pain."

Challenges and need more clinical training

Appropriate assessment and management of pain is a challenging task for nurses employed in an oncologic setting. Appropriate management of the pain of necessary because it distresses the patient, due to frequent diagnostic and therapeutic procedures. Follow-up assessment is also a key phase assessment for the patient to ensure them pain-free living in a home as well as society. Nurses should be clinically competent in recognition or identification of the "pain hints" given by patients. Undoubtedly, assessment of pain hints is also not easy work because patients and health care people may have varieties of perceptions of pain.

It is known that despite advances in the clinical setting, pain is still a poorly evaluated issue and intermittently underestimated by health care professionals. In adequate knowledge and clinical competency to assess pain are major and frequent obstacles observed in pain management services another barrier to adequate pain assessment and management concerns about opioid adverse effects, and the fear of drug addiction (dependence).[3] Numerous published source suggests Health care workers' knowledge and attitudes in terms of pain is lacking that causing undertreatment of pain.[4] HCPs have misconceptions & myths regardingthe pain that impedes satisfactory pain management.[4] Lacking Pain management knowledge is not the single factor that affects patients' well-being but perceptions and satisfaction about pain management followed post-surgery patients were also found low.[4] In-Service Education Program on Nurses' Knowledge and Attitudes towards Pain Management showed improved knowledge and attitude towards pain management.[5] Another study indicates that staff nurses have poor knowledge and negative attitudes about pain assessment and management which affects patient pain control measures.[6] To overcome the barrier of pain assessment nurses need to be clinically competent in the assessment and management of pain.

Inclusion of pain as vital signs

In 2000, an organization named the Joint Commission on Accreditation of Health Care Organizations (J.C.A.H.O) had recommended including pain as a vital sign. The organization suggested that pain should be assessed and documented with all vital signs, they validated it as the fifth vital sign.

WAYS TO ASSESS PAIN

Assessment of pain can be done in three ways, Self-report, Behavioural how the patient behaves, and Physiological clinical observations.

There are different scales available for the assessment of pain, the numeric scale, the Wong-Baker scale (also known as the FACES scale), and The FLACC scale is most commonly recommended for pain assessment.

In the clinical area, Numeric Scale is a widely applied pain scale in adult patients, it is a type of rating scale which include a rating of pain on a scale ranging from 0 to 10. In this scale nurses ask the patient for a verbal reply to the question, this scale providesa more accurate result with the visual analog scale. This scale maybe applied to the conscious patient who can reply verbally and patients minimum having 9 years of age and older.[7]

Fig. 1: Pain assessment numeric scale
Source: https://www.physio-pedia.com/Numeric_Pain_Rating_Scale

The Wong-Baker FACES Scale is used by observing the facial expression of the patient. The facial expression is linked with numbers as mentioned on a scale that isranged from 0 to 10. This scale is generally applied onchildren. This scale is thought to be appropriate for patients ages three and older. This scale is also used for adults who have developmental or communication challenges.[7]
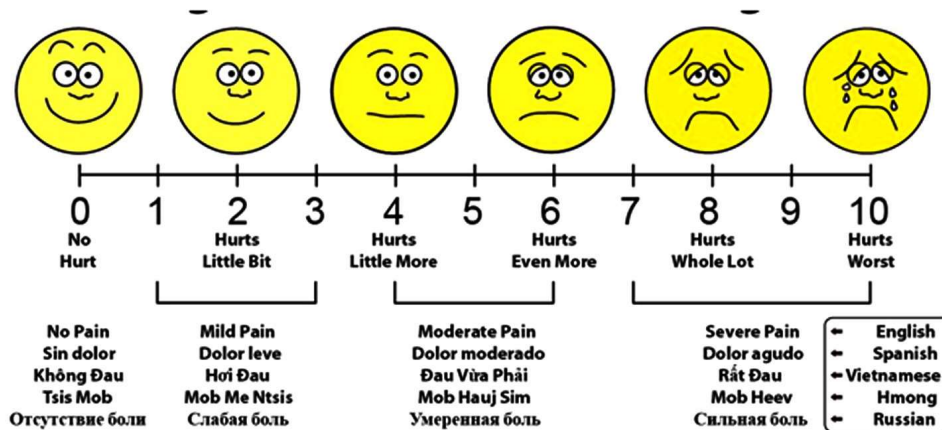

Fig. 2: Wong Bakers Scale
Source: https://www.ahutton.com/cgw/pain-scale-options.htm

FLACC scale is based on observation of behaviors, andit is generally used in pediatric patients less than three years of age and patientswho can notreport themselves.

The full name of FLACC is Face, Legs, Activity, Cry, and Consolability. In this scale behaviors that are explained are linked with a number; each unit is computed, in this scale pain score is displayed in a number ranging from 0 to 10. This scale is also recommended for developmentally delays patients and patients who have cognitive impairment.[7]

Fig. 3: FLACC Scale
Source: https://healthjade.net/flacc-scale/

A large number of a patient diagnosed with cancer, encounter anxiety and depression, therefore, the aim of pain management in a cancer patient should be a focus on the patient's comfort and function while preventing unwanted adverse effects from medications.[8]

PHYSIOLOGICAL INDICATORS

Some physiological indicators may alter by pain perception

- Elevation of Heartrate

- Shifting of Respiratoryrate and pattern from normal ie: increase, decrease, or change pattern
- Elevation of Blood pressure
- Reduction of Oxygen saturation[9]

But it is thought that physiological indicators alone cannot be applied as a measurement tool for assessing pain. A tool that includes physical, behavioral, and self-report should be preferred when possible. However, in certain conditions, such as mechanically ventilated patients and patients on sedation, physiological indicators (hints) of pain can be useful to evaluate a patient's feeling of pain.

CONCLUSION

Pain is a world wide health issue. Pain assessment & Management requires the attention of health professionals. Pain is one of the most common under-evaluated vital signs in the health care sector. Under evaluation causes, discomfort to the patient as well as psychiatric problems, Better evaluation of pain stimulates good therapeutic management of it which improves the quality of life among patients Pain assessment & management is complex, there are varities of factors that affect pain assessment and management services thus a deeper understanding of the barriers and overcoming to this barrieris required for proper and effective pain management services. The barrier needs to be addressed to remedy the deficiencies among HCPs and improve the quality of patient care.

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