TRAINING MODULE FOR NURSES (ADULT PATIENTS)
1. INTRODUCTION

- Pain is a common symptom experienced by many patients. Patients often have to tolerate severe pain due to poor pain management, because of our prejudice, ignorance and fear of side effects of pain medication.

- Pain in adults is often under-recognised and under-treated due to:
  - Ignorance
  - Inexperience
  - Overwork
  - Traditional fears of
    - Addiction to opioid
    - Serious side effect eg. respiratory depression
  - Failure of patients to ask for pain relief

- Pain assessment is an important aspect in patient care that we need to seriously undertake in order to make patients’ stay comfortable. Pain is very subjective and the patient’s self report is the gold standard in the measurement of pain.
• Doctors and nurses should not just guess what the patient’s pain level is; rather, we should ask the patient and believe the patient’s report of his/her pain level.

• Do not ignore patients’ complaint of pain.

• Pain in adults must be addressed and treated adequately to:
  o Promote holistic patient-centered care
  o Facilitate rapid recovery and discharge
  o Reduce post-operative morbidity

• When patients complain of pain, nurses need to take action and evaluate the results of this action. An action may not necessarily be administering analgesics. It can be taking nursing actions (like repositioning the patient) to relieve pain. You will then need to reassess the patient to check the effectiveness of your action and to decide whether analgesic medication or other treatment is required.

• “Pain as 5th Vital Sign” brings about multiple benefits to the patients, and to the organization. Importantly it promotes nurse-patient interaction, doctor-patient interaction and client satisfaction. It also incorporates the 7’S’ as recommended by the Nursing Division, Malaysia.

2. OBJECTIVES:

The purpose of this module is to train nurses on pain assessment and pain management in order to implement pain as the 5th vital sign effectively in their respective hospitals.

At the end of this course, you will be able to:

i. Define pain and describe types of pain.
ii. Undertake a comprehensive assessment of pain in your patients.
iii. Use pain assessment tools effectively
iv. Assess patients’ pain level effectively
v. Identify and carry out nursing interventions appropriate in pain management
vi. Involve patients in their pain management

3. DEFINITION OF PAIN

Pain is defined as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage”.

Merskey and Bogduk, International Association for the Study of Pain (IASP)

“Different patients experience different pain levels & pain tolerance varies from patient to patient depending on heredity, energy level, coping skills and previous experiences with pain.”

Principles in Pain Management & Pain Assessment 2001
4. TYPES OF PAIN

- Acute pain – pain associated with tissue injury e.g. pain after surgery, fracture, burns, inflammation, etc.
  - Usually nociceptive somatic pain which is usually well localized, described as sharp, aching or throbbing, usually worse on movement.
  - May be visceral pain which is usually poorly localized, described as deep, cramping, gnawing, colicky.

- Chronic pain – pain >3 months, or pain that persists after the injury has healed
  - May be nociceptive (somatic or visceral) or neuropathic.
  - Neuropathic pain is pain resulting from injury to the central or peripheral nervous system and is often described as burning, shooting, stabbing; it may be associated with numbness, tingling or other sensory changes.
  - Includes chronic cancer pain.

5. EFFECTS OF ACUTE PAIN

1. Restricts movement
2. Disturbs sleep / rest
3. Restricts activities e.g. ambulation
4. Affects emotions and relationships, e.g. patient may be depressed, anxious, irritable
5. Has physiological effects on various systems including:
   - CVS: Increased HR, BP
   - Respiratory system: reduced cough, cannot take deep breaths → increased risk of pneumonia, hypoxia
   - Endocrine system: increased stress hormones e.g. cortisol
   - GIT: ileus, reduced bowel movement

6. PAIN ASSESSMENT

6.1 WHY PAIN ASSESSMENT?

- To ensure patients in pain receive adequate pain relief with minimal side effects.

6.2 WHEN SHOULD PAIN BE ASSESSED?

1. At regular intervals – as the 5th vital sign during routine observation of other vital signs, i.e. BP, heart rate, respiratory rate and temperature. This can be 4 hourly, 6 hourly or 8 hourly.
2. On admission of patient.
3. On transfer-in of patient.
4. At other times apart from scheduled observations:
   - Half to one hour after administration of analgesics and nursing intervention.
   - During and after any painful procedure in the ward e.g. wound dressing.
   - Whenever the patient complains of pain.
6.3 WHERE SHOULD PAIN BE ASSESSED?

Pain should be assessed **routinely** for all patients in
- All Medical wards (including neurology, palliative care, rehabilitation, etc)
- All Surgical wards (including neurosurgery, urology, etc)
- Obstetric & Gynaecology wards
- Orthopedic wards (including spinal ward)
- Ophthalmology wards
- Otorhinolaryngology wards
- Oncology wards
- Paediatric wards
- Emergency department
- Ambulatory care units

Exceptions: In the following areas, it may be difficult to assess pain routinely because of various reasons e.g. patient is sedated or unconscious
- Intensive Care Unit, Neonatal Intensive Care Unit, Coronary Care Unit
- Labour room (except those on obstetric epidural service)
- Operation theatres (except in Recovery Room)

6.4 WHO SHOULD DO PAIN ASSESSMENT?

- All nurses
- All Doctors
- All Student nurses
- All medical students
  ..... Everyone!

6.5 WHICH PAIN ASSESSMENT TOOL TO USE?

There are many pain assessment tools available, including:
- Numerical Rating Scale (NRS)
- Visual Analogue Score (VAS)
- **Combination Rating scale (NRS &VAS)**
- Categorical Score
- Functional Score
- FLACC Observational Pain Score
- Wong Baker Faces Scale

1. Numerical Rating Scale
   *(Pain score is given as a number from zero to ten)*
   "If 0 = no pain, and 10 = the worst pain you can imagine, what number is your pain?"
2. Visual Analogue Score (VAS)
The patient is asked to slide a small bead or put a mark along a line to indicate the severity of his/her pain. Total length of the scale is 100 mm. The score is recorded in mm (0 to 100) or in cm (0 – 10).

3. Combination Rating Scale (NRS + VAS)
This is a combination of the NRS and the VAS – the patient is asked to indicate by pointing or sliding a bead along a scale to indicate the severity of his/her pain. The scale has numbers and the score is recorded as a number from zero to ten. THIS IS THE RECOMMENDED SCALE TO USE FOR THE MINISTRY OF HEALTH

4. Categorical Score
The patient rates his/her pain level using words: mild, moderate, severe or intolerable. This can then be recorded in words or in numbers e.g.
- 0 = No pain
- 1 = Slight / mild pain
- 2 = Moderate pain (tolerable)
- 3 = Severe pain
- 4 = Worst pain imaginable (intolerable)

This is not a preferred method as it is less sensitive.
5. Functional Score
The patient is asked what he/she can or cannot do i.e. the functional limitation.
e.g. the nurse asks the patient:
‘Can you sit up?’
‘Can you take deep breaths?’
‘Can you walk this morning?’

This is not a preferred method as the nurse is not able to record the numeric score for
the level of pain. However, it is useful to know the functional level of the patient.

6. FLACC Observational Pain Score
This is an observational score, and is used for Paediatric patients aged >1 month to 3
years. It may also be used in adult patients who are unable to communicate verbally,
e.g. very elderly patient, cognitively impaired patient.

1. Observe behaviour
2. Select score according to behaviour
3. Add the scores for the total

Each of the five categories (F)ace, (L)egs, (A)ctivity, (C)ry and (C)onsolability is scored from 0-2, resulting in total range of 0-10

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<thead>
<tr>
<th>Category</th>
<th>Scoring</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
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<tr>
<td>Face</td>
<td>No particular expression or smile</td>
</tr>
<tr>
<td>Legs</td>
<td>Normal position or relaxed</td>
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<tr>
<td>Activity</td>
<td>Lying quietly, normal position, moves easily</td>
</tr>
<tr>
<td>Cry</td>
<td>No cry (awake or asleep)</td>
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<tr>
<td>Consolability</td>
<td>Content, relaxed</td>
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</tbody>
</table>
7. Wong Baker Faces Scale

The Wong-Baker faces scale (adapted from Wong DL et al., eds. Whaley and Wong’s essentials of pediatric nursing. 5th ed. St Louis, MO: Mosby, 2001)

### 6.6 HOW TO USE THE PAIN ASSESSMENT TOOL?

1. Greet patient / Salam
2. Inform the purpose: to get the patient’s correct pain score for proper treatment
3. Show the patient the pain assessment tool and teach him/her how to use it, e.g. using the combination NRS/VAS scale, ask the patient:

   “If '0' (smiling face) is no pain and '10' (crying face) is the worst pain you can imagine, what number would you give your pain now?”

4. Give the patient time to think and give the pain score – be patient!
5. Always use the same pain scale for the same patient.

   Note: Record ‘Unable to Score’ for adult cognitively impaired patients and unconscious patients.

### 6.7 Taking a Pain History

At the first contact, the nurse should start by taking a pain history.

i. **Ask the patient:** listen and believe the patient who complains of pain.
   Pain history may be taken using the acronym P A I N:
   - P : Place or site of pain
   - A : Aggravating factors (“What makes the pain worse?”)
   - I : Intensity
   - N : Nature (“What does the pain feel like?”)
   Neutralizing factors (“What makes the pain better?”)

ii. In the first assessment you should mark the pain site(s), and record the date, pain score and nature of pain on the body chart. In subsequent observations, only pain scores are taken and recorded in the pain assessment chart.
BODY CHART TO SHOW PAIN SITES.

FRONT VIEW

29/6/08,
PS - 6
Throbbing
pain

29/6/08
PS – 7
Tingling pain

BACK VIEW

30/6/08,
PS- 6
pricking
pain
7. WHAT IS THE NEXT STEP AFTER PAIN ASSESSMENT

*Follow the Flow Chart for Pain Management in Adult patient (Refer Appendix)*

- **Pain score < 3:**
  No nursing action required, record pain score.
  You should still ask patient whether he / she requires any nursing action or medication.

- **Pain score 4-6:**
  Provide nursing actions or serve Tab. Paracetamol 500 mg to 1 gram (1-2 tablets). You should tell the patient that you are going to serve paracetamol, and ask whether he / she requires anything else.

- **Pain score 7-10:**
  Serve analgesics as ordered. If analgesics not ordered, inform the doctor.

- **Reassess the patient’s pain level half hour to one hour after medication served, or soon after nursing action.**
  *Inform the doctor if more analgesic medication or other intervention is required for severe pain or unrelieved pain.*

7.1 EXAMPLES OF NURSING ACTION

- **Check possible causes of pain e.g.**
  - Blocked urinary catheter
  - Swollen intravenous site
  - Uncomfortable position of patient

- **Encourage Relaxation e.g.**
  - Deep Breathing
  - Meditation

- **Topical application e.g.**
  - Heat therapy
  - Ice / cold pack

- **Touch therapy**
- **Massage**
- **Distraction techniques e.g.**
  - Reading
  - Listening to music / radio
  - Watching TV
**ABCD of Pain Management & Pain Assessment (Jacox et al. 1992)**

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<table>
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<tbody>
<tr>
<td>A</td>
<td>Ask patients pain level regularly. Assess pain systematically.</td>
</tr>
<tr>
<td>B</td>
<td>Believe patient’s pain level. Believe patient’s family on effective pain relief method.</td>
</tr>
<tr>
<td>C</td>
<td>Choose pain control option appropriate for the patient and setting.</td>
</tr>
<tr>
<td>D</td>
<td>Deliver intervention timely, logically and in a coordinated fashion.</td>
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<tr>
<td>E</td>
<td>Empower patient and family in pain management.</td>
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**8. CONCLUSION**

Pain as the 5\textsuperscript{th} vital sign is necessary to ensure patients a pleasant a comfortable stay in the hospital. We must be very positive and implement pain assessment as diligently as we do for the other 4 vital signs of Blood Pressure, Pulse, Respiratory Rate and Temperature.

Pain as 5\textsuperscript{th} vital sign promotes nurse-patient interaction, client satisfaction, reduces length of stay, morbidity and health care costs. It is beneficial to the patient, the organization and everyone in the medical profession. Regular pain assessment therefore should be made a culture in nursing just as for the other 4 vital signs.

**SUMMARY:**

**ROLES & RESPONSIBILITY OF NURSES FOR EFFECTIVE PAIN MANAGEMENT**

- Know how to use the pain assessment tool
- Carry out pain assessment
- Give Prompt nursing action
- Provide Prompt pain relief
- Observe for side effects of analgesics
- Reassess after 30 mins to 1 hour
- Record pain score in the Observation Chart
- Monitor patient’s pain regularly
- Educate patient & family on pain assessment / treatment
- Record all observations and actions
REFERENCES

1. Mersky & Bogduk 1994
2. Griffie, McKinnon, Berry, & Heidrich, 2002
5. JACHO PAIN STANDARD 2001
Appendix: *Flow Chart for Pain Management In adult patient*