



# **DEDER GENERAL HOSPITAL**

## **CHRONIC PAIN AND PALLIATIVE CARE PROTOCOL**

***PREPARED BY: HSQ***

***JULY 2016 E.C***

***DEDER, EASTERN ETHIOPIA***



**PROTOCOL APPROVAL SHEET**

**NAME OF PROTOCOL: CHRONIC PAIN AND PALLIATIVE CARE PROTOCOL**

<b>PREPARED BY</b>			
<b>S/N</b>	<b>NAME</b>	<b>RESPONSIBILITY</b>	<b>SIGN</b>
1	Abdi Tofik (BSc, MPH)	Health Service Quality Director (HSQD)	
2	Abdella Aliyi (BSc MW)	HSQ Officer and Reform f/person	
3	Redwan Sharafuddin (BSc Pharm)	HSQ Officer	

<b>APROVED BY</b>			
<b>S/N</b>	<b>NAME</b>	<b>RESPONSIBILITY</b>	<b>SIGN</b>
1	Nureddin Yigezu (BSc, MPH)	Chief Executive Officer (CEO)	
2	Dr. Derese Gosa (MD)	Medical Director	
3	Dr. Isak Abdi (MD, G/Surgeon)	OR Director & SaLTS Team leader	

**THIS PROTOCOL IS EFFECTIVE**  
**FROM**  
**JULY 2016 E.C TO JUNE 2018 E.C**

## Table of Contents

<b>PROTOCOL APPROVAL SHEET</b> .....	2
<b>1. Introduction</b> .....	1
<b>2. Department of Pain and Palliative Care Services</b> .....	2
<b>3 Palliative care multidisciplinary team</b> .....	2
<b>i. Palliative care multi- disciplinary team members are</b> .....	2
<b>4 Standard documents and tools for pain and Palliative care</b> .....	3
<b>5 Medication, equipment and supplies</b> .....	3
<b>6. WHO Analgesic Ladder</b> .....	4
<b>7. Classification of Pain</b> .....	7
<b>B. Pain Classification by Mechanism</b> .....	7
<b>8. Pain Scales</b> .....	9
<b>B. Wong-Baker FACES scale</b> .....	9
<b>9. Home based care palliative care</b> .....	11
<b>11. References</b> .....	12

## Abbreviation

WHO - World Health Organization

QI - Quality Improvement

MCH - Maternal and Child Health

SMT - Senior Management Team

NGO - Non Governmental Organizations

TOR - Term of Reference

GFR - estimated Glomerular Filtration Rate

NSAID - Non Steroidal antiinflammatory Drugs



## 1. Introduction

- Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage.
- Pain is a subjective experience, varies from person to person and time to time. Pain is whatever the experiencing person says it.
- Palliative care is all about looking after people with illnesses that cannot be cured, relieving their suffering and supporting them through difficult times. (WHO 2004).
- Pain and palliative care extend beyond just pain and symptom control, also addressing the psychosocial and emotional suffering of patients and their families.
- Pain is now established as the 5th vital sign and the need for palliative care in Ethiopia is rapidly increasing.
- Hospice care is a form of palliative care that focuses on terminally ill patients.
- Eligible hospice care patients are those likely left less than 6 months to live.

The **holistic approach** looks at problems in four groups:

- **Physical** – symptoms (complaints), eg pain, cough, tiredness, fever
- **Psychological** – worries, fears, sadness, anger
- **Social** – needs of the family, issues of food, work, housing and relationships
- **Spiritual** – questions of the meaning of life and death, the need to be at peace.



## **2. Department of Pain and Palliative Care Services**

- Department of Pain and Palliative Care Services
- All hospitals should have a Pain and Palliative Care unit/department
- The service is lead by full time pain and palliative care service director/coordinator; preferably senior physician, general practitioner or trained health officer.
- The pain and palliative care director shall report to the hospital's medical director and be a member of the SMT..

## **3 Palliative care multidisciplinary team**

### **i. Palliative care multi- disciplinary team members are**

1. Focal person Department head
2. physician
3. Nurses
4. Social workers
5. Clinical Psychologist/General Psychologist/Counselor
6. Clinical Pharmacies
7. Spiritual leaders
8. Secretary

#### 4 Standard documents and tools for pain and Palliative care

- The hospital should avail pediatric and adult pain and palliative care protocols approved by the hospital management.
- All the hospital wards and clinical areas should receive a soft and hard copy of the protocols.
- The standard pain and palliative care guidelines should be available, understood and adhered to by all clinical staff in all service delivery points.
- The service should be audited regularly by reviewing patient medical records and QI activities should be done whenever gaps are identified.


#### 5 Medication, equipment and supplies

- Availability of medical equipment's, Supplies and consumables are essential for the provision of pain and palliative care.
- Hospitals shall identify and avail the national package of essential medications, standard equipment, and minimum supplies (**Annex 4**).

## 6. WHO Analgesic Ladder

The WHO analgesic ladder provides a general guide for pain management based on severity. However, it does not replace individualized management based on careful patient assessment.

**Table 1: the WHO three-step analgesic ladder for Adult**

SN	- Step 1 NON-OPIOID ± adjuvants	- Step 2 WEAK OPIOID ± non-opioid ± adjuvants	- Step 3 STRONG OPIOID ± non-opioid ± adjuvants
1	Paracetamol 500mg 2 tabs q/6 hrs.	<b>If pain is persistent or worsening:</b> Start codeine 30-60mg four times a day regularly	<b>Persistent or worsening pain</b> Commence strong opioid e.g. oral morphine Oral solution 10mg/5mL
2	NSAID e.g. ibuprofen, or	Tramadol 50 mg twice a day	
3	Naproxen 250-500mg twice daily	± non-opioid ± adjuvants	± non-opioid ± adjuvants
4	celecoxib 100mg twice daily, increased if necessary to 200mg twice daily ± adjuvants		
	<i>Persistence and Worsening pain</i> 		
	<b>N.B Consider Prophylactic Laxative to avoid Constipation for Morphine</b>		



### WHO Analgesic Ladder Step 1 – Non-opioids

- For patients without risk factors for Paracetamol hepatotoxicity, the standard regimen is 1g four times a day.
- For patients with more than one hepatic risk factor (old age, weight less than 50kg, poor nutritional status, fasting/ anorexia, chronic alcohol use) – reduced dose of 500mg four times a day, increased if necessary to a maximum of 3g per day in divided doses, is advisable.
- For patients with severe renal impairment (eGFR<10ml/min) reduce dose (maximum 3g/24hrs)

### WHO Analgesic Ladder Step 2 – Weak Opioids


- **Low Dose Morphine** generally provides quicker and better relief from cancer pain than weak opioids.
- If considering prescribing a weak opioid be aware that: **Codeine** has to be converted to morphine in the body to achieve an analgesic effect. Poor metabolizers of codeine may not experience analgesia.
- Ultra-rapid metabolizers may experience toxicity.
- Tramadol 50 mg twice a day

### WHO Analgesic Ladder Step 3—Strong Opioids

- Strong Opioids Morphine is the strong opioid of choice for management of moderate to severe pain in palliative care patients, based on familiarity, availability and cost.
- The oral route is preferred as long as the patient has no problems with swallowing or absorption. Other strong opioids are used mostly when morphine is not readily available.
- There are generally no absolute contraindications to the use of strong opioids in palliative care patients with advanced progressive disease, provided the dose is titrated carefully against the patient's pain.

<i>Non-opioids</i>	ibuprofen or other NSAID, paracetamol (acetaminophen), or aspirin
<i>Weak opioids</i>	codeine, tramadol, or low-dose morphine
<i>Strong opioids</i>	morphine, fentanyl, oxycodone, hydromorphone, buprenorphine
<i>Adjuvants</i> or	antidepressant, anticonvulsant, antispasmodic, muscle relaxant, bisphosphonate, corticosteroid

**Table 2: WHO Analgesic Pediatrics ladder**

Step-1 Mild Pain		Step-2 Moderate/Sever pain
Non-Opioid		Strong Opioid
± adjuvants		Morphine
		± non-opioid ± adjuvants

**NB:** Consider Prophylactic Laxative to avoid Constipation for Morphine

- **.Step-1 For Mild Pain** Age>3 months Ibiprufen, Paracetamol, Age <3 months Paracetamol based on KG formula
- **Step-2 Strong Opioid** :Morphine is medicine of choice/may available or Phentaline, Oxycodine, Hydromorphone,
- **Adjuvants:** Antidepressants, Anticonvulsant, Antispasmodics, Muscle relaxants, bisphosphonate or Corticosteroid
  - Combine an opioid and non-opioid is effective but, do not combine the same class
  - Time doses based on drug half-life (dose by the clock) do not wait pain to recur

### **Pain as a 5<sup>th</sup> vital sign**

Pain should refer to as the “fifth vital sign,” (along with temperature, pulse rate, blood pressure and respiratory rate) and should be assessed regularly and frequently. Pain is individualized and subjective; therefore, the patient’s self- report of pain is the most reliable gauge of the experience. All hospitals should have proper assessment of pain and this is essential for successful management.

**“Pain is a more terrible lord of mankind than even death itself”**

Albert Schweitzer

## 7. Classification of Pain

Pain can be described and classified based on different ways:

A. **Duration** – acute or chronic

B. **Mechanism** – nociceptive or neuropathic

C. **Origin** – somatic or visceral

**Situation** – incidental pain, breakthrough pain, procedural pain.

### A. Pain Classification by Duration

#### i. Acute Pain

- ☞ Characterized by help-seeking behavior such as crying and moving about.
- ☞ Definite onset with limited and predictable duration.
- ☞ Clinical signs of sympathetic over-activity: tachycardia, pallor, hypertension, sweating, grimacing, crying, anxious, pupillary dilation **Example:** trauma, surgery, or inflammation

#### ii. Chronic Pain

- ☞ Patients may not show signs of distress seen in acute pain
- ☞ **Cause:** chronic pathological process
  - Under-treatment of acute pain can lead to changes in the central nervous system that result in chronic pain

#### **Signs/symptoms:**

- ☞ Gradual or vague onset
- ☞ Continues and may become progressively more severe
- ☞ Patient may appear depressed and withdrawn
- ☞ Usually no signs of sympathetic over-activity.

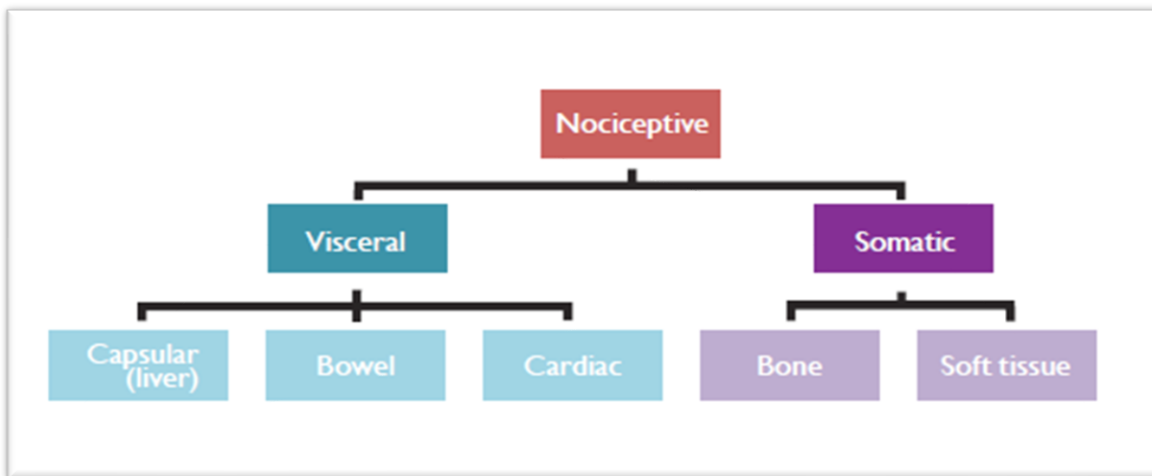
### B. Pain Classification by Mechanism

#### i. Nociceptive Pain

Caused when nerve receptors called nociceptors are irritated. Nociceptors exist both internally (visceral) and externally (somatic)



- ☞ Indicates that nerve pathways are intact



## ii. Neuropathic Pain

- ☞ Caused by damage to nerve pathways.
- ☞ Described as burning, prickling, stinging, pins and needles, insects crawling under skin, numbness, hypersensitivity, shooting, or electric shock
- ☞ Causes: infiltration by cancer, HIV infection, or herpes zoster, drug-related peripheral neuropathy, central nervous system injury, or surgery.

## C. Pain Classification by Origin

### i. Somatic Pain

- ☞ Stimulation of nociceptors in the skin, soft tissues, muscle, or bone
  - Pain usually is in a particular location
  - Aching, throbbing, or persistent pain
  - Causes: bone or soft tissue infiltration

### ii. Visceral pain

- ☞ Stimulation of nociceptors in internal organs and hollow viscera organs.
- ☞ Pain is often not in a single location
- ☞ Described as pressure, cramping, or squeezing pain
- ☞ Causes: blockage, swelling, stretching, or inflammation of the bowel, liver, cardiac...

## D. Pain Classification by Situation

- Incident pain** – occurs only in certain circumstances (e.g. after a particular movement)

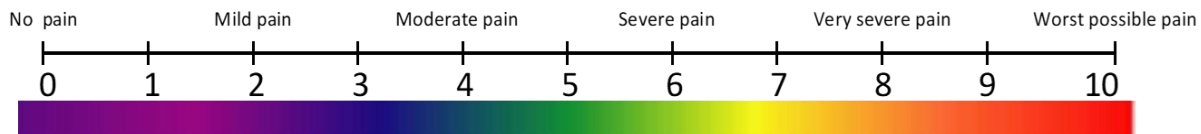
- ii. **Breakthrough pain** – a sudden, temporary flare of severe pain that occurs on a background of otherwise controlled pain.
- iii. **Procedural pain** – related to procedures or interventions.

## 8. Pain Scales

### Scientifically validated pain scales:

- 1) Numeric Pain Rating Scale
- 2) Wong-Baker FACES Scale: for children who can talk
- 3) Observation-FLACC Scale: for children who can't talk

#### A. Numeric pain rating scale



- Pain levels from 0-10 can be explained verbally to the patient using a scale in which 0 is no pain and 10 is the worst possible pain imaginable
- Patients are asked to rate their pain from 0 to 10
- Record the pain level to make treatment decisions, follow-up, and compare between examinations

#### Ways to assess pain in children

- Ask the child: Wong-Baker Faces scale
- Ask the parent or caregiver
  - ☞ Ask about previous exposure to pain, verbal pain indicators, usual behavior or temperament
- Observe the child: FLACC scale
- The child is the best person to report his/her pain!

#### B. Wong-Baker FACES scale



- Use in children who can talk (usually 3 years and older)

- Explain to the child that each face is for a person who feels happy because he has no pain, or a little sad because he has a little pain, or very sad because he has a lot of pain
- Ask the child to pick one face that best describes his or her current pain intensity
- Record the number of the pain level that the child reports to make treatment decisions, follow-up, and compare between examinations

### C. FLACC scale

- ☞ Use in children less than 3 years of age or older children who can't talk
- ☞ Use it like an APGAR (Appearance, Pulse, Grimace, Activity, Respiration) score, arriving at a score out of 10
- ☞ Face, Legs, Activity, Cry and Consolability
- ☞ Score each of the five categories (0-2)
- ☞ Add the five scores together to get the total (out of 10)
- ☞ The total score can be related to pain intensity

Category	Score	Pain intensity	FLACC score
Face		Relaxed and comfortable	0
Legs			
Activity		Mild discomfort	1-3
Cry		Moderate pain	4-6
Consolability		Severe discomfort/pain	7-10
<b>Total</b>			

SCORING			
CATEGORIES	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting, back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort

Each of the five categories: **(F)** Face; **(L)** Legs; **(A)** Activity; **(C)** Cry; **(C)** Consolability, is scored from 0–2 which results in a total score between 0 and 10 (*Merkel et al. 1997*)

Permission 2: Reproduced with permission from the Regents of the University of Michigan, © 2002

## **9. Home based care palliative care**

- Home-based palliative care Guidelines, Protocol, Registration book, education materials etc.
- HBC Service plan (nursing care, Companion-ship etc.) and staff visiting schedule
- presence of MDT for HBC or trained team in facilities of the cluster/hub
- Look for reporting format, Activity Report or referral service linkage reports

## 11. References

1. National Palliative Care guidelines (2016) MOH, Ethiopia
2. Hospice Fundamentals, LLC PALLIATIVE CARE HANDBOOK (2019) Jean Acevedo, LHRM, CPC, CHC, CENTC, AAPC Fellow,
3. World Health Organization (1990) Cancer Pain Relief and Palliative Care. Available at: <http://whqlibdoc.who.int/publications/9241544821.pdf> (Accessed: 8 September 2011).
4. World Health Organization (2002) WHO Definition of Palliative Care. Available at: <http://www.who.int/cancer/palliative/definition/en/> (Accessed: 10 November 2010).
5. World Health Organization (2014a) WHO African Region: Ethiopia. Available at: <http://www.who.int/countries/eth/en/> (Accessed: 4 August 2014).
6. World Health Organization (2014b) ‘Strengthening of Palliative Care as a Component of Integrated Treatment throughout the Life Course’, Executive Board 134th Session, Provisional Agenda Item 9.4. EB134/28, World Health Organization.
7. World Palliative Care Association (2005) an Advocacy Tool Kit for Hospice and Palliative Care Organizations. Available at: [http://www.wpca.org.uk/advocacy\\_toolkit\\_05April\\_\(1\).pdf](http://www.wpca.org.uk/advocacy_toolkit_05April_(1).pdf) (Accessed: 10 August 2014).
8. Wright, M., Clark, D., Hunt, J. and Lynch, T. (2006) Hospice and Palliative Care in Africa. A review of developments and challenges. 1st edition. New York: Oxford University Press.
9. Wube, M., Horne, C. J. and Stuer, F. (2010) ‘Building a Palliative Care Program for Ethiopia: the impact on HIV and AIDS patients and their families’, Journal of Pain and Symptom Management. 40, (1) pp.6-8.
10. Palliative Home Care and Services provided in a Rural Area – Kerala, India’, Indian Journal of Palliative Care, 18 (3), pp.213-218



