Integrating Community Palliative Care Into Domiciliary Care

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WHO Definition

“Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.”
Goal of Palliative Care:

- The ultimate goal of palliative care is achievement of the best quality of life for patients and their families.
Specialist Palliative Care

• Involves the role of a trained consultant in palliative medicine.

• Provides expert opinion and care for minority of patients with very difficult symptoms.

• Provides training for others in basic skills to provide care to the majority of patients.

• Provides advice and affirms the role of those providing basic palliative care.
Basic Palliative Care

- All clinicians should be equipped with basic skills and knowledge to relieve suffering.
- All clinicians should also be aware of the need to address psycho-spiritual issues at the end of life.
Summary: Cancer Palliative Care Burden

- Annual cancer deaths = 12,000 per year
- Incidence of advanced Cancer = 24,000 per year
- Moderate to Severe Cancer Pain = 15,000 per year
Evolution of Palliative Care

- 1950’s wartime nursing with unrelieved pain in terminal cancer
- 1958: experienced symptoms controlled with small regular doses of oral morphine (painful to pain free condition)
- 1990’s: focus greatly on patient’s quality of life
DIAGNOSIS & ASSESSMENT OF CANCER PAIN

Clinical Practice Guidelines
Management of Cancer Pain
Development Group
Palliative Care:

- provides relief from pain and other distressing symptoms;
- affirms life and regards dying as a normal process;
- intends neither to hasten or postpone death;
- integrates the psychological and spiritual aspects of patient care;
- offers a support system to help patients live as actively as possible until death;
Palliative Care:

- offers a support system to help the family cope during the patients illness and in their own bereavement;
- uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated;
- will enhance quality of life, and may also positively influence the course of illness;
Palliative care:

- is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications.
## Traditional Model of Care

<table>
<thead>
<tr>
<th>Mainstream Medicine</th>
<th>Palliative Care</th>
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<tbody>
<tr>
<td><strong>Focus on curative management of DISEASE</strong></td>
<td><strong>Seen as failure or dumping-ground</strong></td>
</tr>
<tr>
<td><strong>Lack of focus on SYMPTOMS</strong></td>
<td><strong>Late referrals or failure to shift mode of care to focus on symptoms</strong></td>
</tr>
<tr>
<td><strong>Lack of focus on end-of-life issues</strong></td>
<td><strong>Short time to build rapport and deal with end-of-life issues.</strong></td>
</tr>
<tr>
<td><strong>Inappropriate intervention due to lack of better alternative</strong></td>
<td><strong>Poor symptom control throughout illness</strong></td>
</tr>
</tbody>
</table>
Integrated Model of Palliative Care

Co-management with Mainstream

Disease-modifying therapy (curative, life-prolonging or palliative in intent)

Palliative Care Management

Palliative Care

DEATH

BEREAVEMENT
Disease-modifying therapy (curative, life-prolonging or palliative in intent)

Role of Palliative Care Management

- Early rapport
- Counselling and communication of diagnosis and treatment
- Supportive management of treatment side-effects

- Increasing management of symptoms physical in advanced disease.
  - Actively investigating and diagnosing new problems related to lung cancer.
  - Using active oncology and medical management to treat symptoms ie RT/ chemo

- Mainly supportive therapy if possible at home
  - Stop non-essential medical treatments and focus only on symptom relief
  - Terminal care and ethical issues paramount
Consultative Palliative Care
Consultative Palliative Care

- Offers help to colleagues in areas where they have less experience.

- Visible Role of Palliative Care

- Important area to promote and develop support for palliative care.

- Not to take-over but to co-manage.
Disease-modifying therapy (curative, life-prolonging or palliative in intent)

Role of Palliative Care Management

• Early rapport
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• Increasing management of symptoms physical in advanced disease.
• Actively investigating and diagnosing new problems related to lung cancer.
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• Stop non-essential medical treatments and focus only on symptom relief
• Terminal care and ethical issues paramount
ESSENTIAL Relationship

Hospital Based Palliative Care
• Consultative Service
• In patient Palliative Care Unit

Community Palliative Care
• hospice organisation
• homecare /Domiciliary team.
Home care/ Domiciliary team

- Phase 1: 2014-2015
  - Stroke
  - CP
  - Spinal cord injury
  - Traumatic brain injury
- Phase 2: 2016-2020
  - Palliative (Ca & Non Ca)
Role of Community Palliative Care
Community Palliative Care

- Essential to have support after discharge
- Progressive and unpredictable nature of cancer and other life-threatening conditions.
- Provides support for family and patient at home.
- Gives patients confidence to be at home.
Community Palliative Care

- Provides continuity of care
- Provides conducive home environment
- Reduces burden on in-patient services.
- Allows patient to spend last moments at home if desired.
Spectrum of Palliative Care Service

- Tertiary Care
- Specialist Palliative Care
- Secondary Care
- Basic Hospital Palliative Care
- Primary Care
- GP Palliative Care
Issues and Challenges

- Lack of staff (who works with their heart)
- Lack of knowledge (to speak in a same language of network)
- Lack of experience
- Lack of proper flow for continuity of care after discharge
- Lack of communication
Clinical Practice Guidelines
Management of Cancer Pain
Development Group
PAIN the 5th Vital Sign

Pain As The 5th Vital Sign
P5VS

PAIN the 5th Vital Sign

P5VS guide book

Pain scale

PAIN AS THE 5TH VITAL SIGN

1. PULSE
2. BLOOD PRESSURE
3. TEMPERATURE
4. RESPIRATORY RATE
5. PAIN SCORE

Pain assessment should be as ROUTINE as checking other vital signs.
MANAGEMENT OF CANCER PATIENT WITH PAIN IN PRIMARY CARE

CANCER PATIENT WITH PAIN

ASSESSMENT:
- HISTORY
- PHYSICAL EXAMINATION
- INVESTIGATION

DIAGNOsis

PAIN SCORE

MILD (1-4)  MODERATE (5-6)  SEVERE (7-10)

STEP 1  STEP 2  STEP 3

CONTROL  CONTROL

NO  NO

YES  YES

FOLLOW UP:
- REFER TO MULTIDICPLINARY TEAM (PSYCHOSOCIAL & FINANCIAL SUPPORT)

REFERRAL:
- PC TEAM @ KK
- PC TEAM @ HOSPITAL
- PAIN SPECIALIST

REFER BACK WITH MEDICATION FROM STEP 3
ASSESSING SEVERITY

PATIENT SELF-REPORT
Pain assessment Tools (Appendix)

Adults and Children > 7 years old - Numerical Rating Scales (NRS)/Visual Analogue Scale (VAS)

1 month - 3 years old - FLACC Scale

3 years - 7 years old - Wong Baker Faces Scale

1. Combined NRS/VAS

2. 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)
# FLACC Scale

**Children >3 months to 3 years/Cognitively impaired adults**

<table>
<thead>
<tr>
<th>Category</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td></td>
<td>No particular expression or smile</td>
</tr>
<tr>
<td><strong>Legs</strong></td>
<td>Normal position or relaxed</td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td>Lying quietly, normal position, moves easily</td>
</tr>
<tr>
<td><strong>Cry</strong></td>
<td>No cry (awake or asleep)</td>
</tr>
<tr>
<td><strong>Consolability</strong></td>
<td>Content, relaxed</td>
</tr>
</tbody>
</table>
Most Commonly Used Unidimensional Assessment Tools\(^1\)

i. **Visual Analogue Score**
   - Patient is asked to slide a small bead along a scale to indicate the severity of pain
   - Total length of scale is 100 mm (10 cm)

\(^1\)Caraceni A, et al., J Pain Symptom Manage, 2005
Adults & children >10 years

"On a scale of 0-10 (show the pain scale), if '0' = no pain & '10' = worst pain you can imagine, what is your pain score now?"
WHO Analgesic Ladder  (Grade A)

Adapted from WHO. Cancer pain relief (2nd Ed) with a guide to opioid availability. Geneva: WHO; 1996
Introduction

- WHO states that 70-90% of cancer pain can be relieved by drug therapy.

- Opioid therapy is the mainstay of management for moderate to severe cancer pain.

- Oral Morphine is the drug of choice for the management of moderate to severe cancer pain.
Chronic Cancer Pain – a dynamic process

- Pt’s pain changing
- Pt’s condition changing
- Pt’s goals of care changing
Challenges of Chronic Cancer Pain Management

- Controlling Pain
- Controlling Side Effects
- Providing most appropriate route of administration and ensure compliance
- Do no harm
Know your opioid!

- Types of opioid - Aqueous/tab/patch/subcut
- Opioid responsiveness
- Opioid rotation/switching with conversion ratio
- Breakthrough pain management
The degree of analgesia achieved as the dose is titrated to an **endpoint** defined either by intolerable side effects or the occurrence of acceptable analgesia.
Opioid Rotation

- Concept whereby opioid is changed to another in order to improve the balance between analgesia and side effects.
Opioid Rotation

- May also refer to changing from one route of administration to another route using the same opioid. Eg. Oral morphine to s/c morphine or Intrathecal morphine

- Also known as “opioid switching”
Rationale of Opioid Switching

- Opioid responsiveness for different opioids may vary in each individual.

- Factors interfering with an opioid’s response
  - Progression of the disease
  - Development of tolerance
  - Appearance of intractable side effects
  - Type and temporal pattern of pain
  - Metabolites and excretion
  - Pharmacokinetic and pharmacodynamic factors

Indications for opioid switching

- Inadequate pain relief despite appropriate dose titration of the initial opioid.
- Intolerable side effects (sedation, nausea, vomiting and constipation)
- Renal impairment
- Practical considerations (patient preference, inability to swallow, etc.)
Recommendation

- Oral morphine should be the **first line** therapy for moderate to severe cancer pain.

- Oxycodone & fentanyl are alternatives to morphine for moderate to severe cancer pain.
Table 3. Suggested dose conversion ratio in the direction specified

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Codeine mg/day</th>
<th>Oral morphine mg/day</th>
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**DIVIDE** and **MULTIPLY**
So how do I choose?
Surely a patch is better because it is easier for patient!

Fentanyl is more effective than morphine!

Fentanyl is safer than morphine!

More expensive so must be much better!
## Transdermal Fentanyl

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>• Useful for patients who cannot swallow or have bowel obstruction.</td>
<td>• Fixed dose – cannot be used in opioid naive</td>
</tr>
<tr>
<td>• Better compliance – change every 72 hours</td>
<td>• Difficult to adjust dose as increases must follow patch strength.</td>
</tr>
<tr>
<td>• Safer to use in renal failure</td>
<td>• Breakthrough analgesia requires using IR morphine or IR oxycodone.</td>
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Newer compared to morphine so must be better!

Stronger than morphine so must be better relief!

Not as notorious as morphine so must be safer and no problems with addiction!
# Oxycodone

## Advantages
- Similar to morphine in terms of onset and duration of action as well as titration.
- Easy to convert for patients who can take oral medication.
- Has full range of tablet, injection and liquid preparations.
- Targin is useful for constipation.

## Disadvantages
- More potent hence starting dose may be too high for opioid naive if using oxynorm capsules.
- Requires full range of preparations to be most useful.
Range of Oxycodone Preparations

Immediate release (4-6 hourly)
1. OxyNorm® oral solution (5 mg/5 mL)
2. OxyNorm® capsules (5 and 10 mg)
3. OxyNorm® injection (10 mg/mL)

Prolonged release (12-hourly)
1. OxyContin® (10, 20 and 40 mg)
   *New formulation – abused deterrence
1. Targin® (oxycodone + naloxone: 5, 10, 20 mg)
Oxynorm: Immediate Acting Preparations

C. oxynorm

- Oxynorm solution
- Inj. oxynorm
Oxycontin: Prolonged Release Preparation

T. Oxycontin

T. Targin (Oxycontin + Naloxone)
Small starting doses

Targin 5/2.5mg

Liquid oxynorm 1mg/ml
Factors to consider

- Can the patient take oral medication?
- Is the renal function normal?
- What is available in the pharmacy?
When do I use Fentanyl
Patients who cannot swallow due to bowel obstruction or head and neck cancer.
Patients with renal impairment or where I anticipate worsening renal function.
Other reasons to consider fentanyl

Patients who cannot tolerate both morphine and oxycodone due to side effects.

Patient in terminal phase wanting to go home and requires continuation of opioid therapy.
Conversion factor for fentanyl

- Total daily dose of opioid in morphine equivalents = 60 mg

- Converted dose of transdermal fentanyl
  
  $= 60 \div 3$
  
  $= 20 \text{ mcg/h of transdermal fentanyl}$
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When do I use Oxycodone
Intolerant to morphine but normal renal function and tolerating oral meds
Not getting enough relief with morphine

I can't stand it!
Mixed nociceptive and neuropathic pain
Severe Constipation
Morphine Phobia
Conversion Factor for Oxycodone

- Oxycodone is $1.5 \times$ more potent than morphine
- Total daily morphine usage = 60 mg
- Converted oxycodone dose = $60 \div 1.5 = 40$ mg

* May then dose reduce further by 25-30% to take into account incomplete cross tolerance.
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The role of various oxycodone preparations in managing cancer pain
Case study 1

- Mr. H, 62 y.o. Gentleman with advanced colon cancer and liver metastasis.

- c/o pain in the abdomen and right hypo-chondrium with PS 7/10

- Was given aq. Morphine 3mg 4 hourly and prn to titrate analgesia.

- Develop severe nausea and vomiting as well as drowsiness.

- Refused further morphine
Case study 1

- Started on oxynorm solution 1mg 4 hourly and prn.

- Tolerated oxynorm solution well and took additional doses of 1mg x 3 with pain score reducing to 3-4/10.

- Pain fairly stable with dose of 10-12mg oxynorm daily.
Case Study 1

- Converted to T. Targin 5mg bd and oxynorm solution 2mg prn

- Conclusion:
  - Oxynorm solution can be useful for small dose titration in cancer pain and small prn doses.
  - Targin 5mg is useful for low dose oxycodone requirements for maintenance analgesia.
Opioid rotation and mixed nociceptive and neuropathic pain

ANALGESIA

SIDE EFFECTS
Case Study 2

- En P, 73 case of advanced hormone refractory prostate cancer with extensive bony metastasis in the spine and bony pelvis.

- c/o severe back pain with pain score of 6-7/10 in the lower back worse on movement.

- Also c/o pain radiating down from pelvis to right lower limb associated with numbness and dysaesthesia. Very severe and spontaneous at times.
Case study 2

- Was started on aq. Morphine and titrated dose up to SR morphine 180mg bd with Aq morphine 50mg prn. Pain score still 4-5/10.

- Was not drowsy and tolerated morphine well however pain score not reducing with further breakthrough doses.

- Also spontaneous pain radiating from pelvis to right lower limb persistent.
Case Study 2

- Opioid rotation to oxycontin 120mg bd and oxynorm capsule 30mg prn.

- Pain score reduced to 2-3/10 with less spontaneous neuropathic pain.
Severe Constipation

Combined Oxycontin + Naloxone tablets

5/2.5mg
10/5mg
20/10mg
Case Study 3

- Pn. T, 48 y.o. Lady with metastatic ca lung and severe chest pain.

- On T. Morphine SR 30mg bd and aq morphine 10mg prn

- Pain fairly well controlled but 2 weeks later readmitted for poor pain control and severe constipation.

- Was already on Sy. Lactulose 15mls tds
Case Study 3

- Was converted to s/c morphine 5mg 4 hourly and prn to control pain.

- Later bowels cleared using oral fleet x 1 and continued with lactulose and bisacodyl.

- Once pain controlled, converted to T. Targin 20/10mg bd and oxynorm 5mg prn.

- Pain well controlled and no further issues with constipation.
Using Targin

- **Remember:**
  - This is a prolonged release oxycodone exactly like oxycontin but with naloxone combined.
  - Dosing is similar to using oxycontin.
  - Maximum dose of Targin is limited by the Naloxone component.
    - Not more than 40/20mg bd (this may change with newer data)
Using Targin

- Same principle applies – do not cut crush or chew targin tablets

- Once maximum targin given but if pain still not optimal, to top up oxycodone dosing with T. Oxycontin.
  - Eg. If total oxycontin dose is 120mg bd then give Targin 40/20mg bd + Oxycontin 80mg bd

- Breakthrough medication is using oxynorm prn at 1/6 -1/12 of the total 24 hour requirement
Oxycontin Prolonged Release – new abuse deterrent formulation
Abuse deterrent oxycontin

- Difficult to crush hence no powder to inhale.
- Forms a gel when wet and does not dissolve so cannot inject.
Abuse
Deterrent
Oxycontin
Conclusion

- Opioid rotation is a useful strategy to optimise cancer pain management.
- Morphine is still the first choice for management of cancer pain but opioid rotation may be necessary almost 50% of the time.
- Selection of alternative opioids should be based on specific reasons and indications rather than randomly.
Factors may influence analgesic response

- Pain mechanisms or multisites pain
- Opioid tolerance
- Progression of disease
- Sensitivity to opioid side effects
- Changes in the route of administration
- Other co-morbidities: Renal or liver impairment
Complex cancer pain

- Pain Specialist or anaesthetist may contribute in managing the more complicated and complex cases.
- Patients may require really high dosage of opioid or other adjuvant medications with special delivery techniques.
- About 8–11% of cancer patients may benefit from interventional procedures.
STRONG OPIOIDS

• most commonly use:
  – Morphine
  – Hydromorphone
  – Transdermal fentanyl
  – Oxycodone
  – Methadone

• DO NOT use Pethidine long-term
  – active metabolite *norpethidine* → seizures
## Adjuvant Analgesics

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Common drugs used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants</td>
<td>TCA – amitriptyline, nortriptyline</td>
</tr>
<tr>
<td></td>
<td>SSNRI – paroxetine, duloxetine</td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>Sodium valproate</td>
</tr>
<tr>
<td></td>
<td>Carbamezepine</td>
</tr>
<tr>
<td></td>
<td>Gabapentin</td>
</tr>
<tr>
<td></td>
<td>Pregabalin</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>Dexamethasone</td>
</tr>
<tr>
<td>Antispasmodic</td>
<td>Buscopan</td>
</tr>
</tbody>
</table>
Adjuvants

- Alpha\(_2\) – agonists - Clonidine
- Benzodiazepines
- Muscle relaxants
- NMDA-blockers - Ketamine
- Systemic local anesthetics - lignocaine
Adjuvants

- Bone pain
  - Bisphosphonates
  - Calcitonin
- Pain from malignant bowel obstruction
  - Steroids
  - Octreotide
  - Anticholinergics-glycopyrrolate

Practice Points:
- Choose adjuvant carefully (risk:benefit)
- Start low and titrate gradually
- Avoid initiating several adjuvants concurrently
Interventional Techniques

- **Coeliac Plexus Block:**
  - Severe pancreatic cancer pain

- **Epidural/Intrathecal opioids:**
  - Incident pain from spine mets (thoracic and lumbosacral)
  - Severe incapacitating pelvic pain / lumbosacral plexopathy
  - Intolerable side effects

- **Vertebroplasty**
  - Solitary vertebral collapse with good prognosis
Neuraxial block

- Ratio of opioids oral:Epidural:Spinal is 100:10:1
- Opioids, Local anaesthetics, clonidine, baclofen
Internalised intrathecal system

- Last longer
- Smaller rate of infusion so less frequent refilling
- Less infection and fibrosis
Kyphoplasty/Vertebroplasty

1-Fractured Vertebra

2-Insert Instrument

3-Inflate Balloon Tamp

4-Fill with a “support cast”
From hospital to home......

- Continuation of medication-mostly opioid
- Management of breakthrough pain
- Management of side effects
- Follow up
Challenges for optimal home-based palliative care

- Equality of available resources for city and regional/rural
- Greater continuity among the healthcare professionals making home visits.
- Enhanced interdisciplinary collaboration with home/domiciliary service, primary care team and hospice
- Knowledge and familiarity with the techniques
Domiciliary management of spinal catheter

- Those involve in management should be confident in the technique and knowledge
- Patient pain is stabilized as inpatient, systemic opioid is titrated down
- Appropriate training of refilling and monitoring of patient’s condition and implantation sites
Syringe driver

- To provide medicines for symptoms control including analgesic
- Small, battery operated machine for continuous subcutaneous administration, usually over 24 hours
- Useful when oral route of administration is not possible or subcutaneous doses are inappropriate, ineffective or impractical
- Suitable to be used at home
Using Opioids for Breakthrough Pain

Patient Taking Short-Acting Opioids:
  • 50 - 100% of the q4h dose, given q1h prn

Patient Taking Long-Acting Opioids:
  • 10 - 20% of total daily dose given, q1h prn with short-acting opioid preparation
Case 1

- FM, 22 y.o Malay lady
- Diagnosed with left temporal tumour
- Underwent operation and radiotherapy
- 2/12 postoperatively developed severe headache
- Controlled with oral Morphine SR 40 mg bd, Amitriptyline 25 mg and Pregabalin 150mg bd
Condition deteriorating, she was blind and later became unconscious.

On Ryle’s tube feeding, therefore Morphine SR, was changed to Fentanyl patch 37 mcg/hr.

Patient was bedbound at home, so family member came for continuation of medications.

Liaised with Klinik Kesihatan for home visit.
Case 2

- 47 y.o man with advanced Ca Lung
- Metastases to lumbar spine, liver and psoas muscle, severe pain over the back and pelvic area
- Required up to 1000 mg of IV Morphine per day, Amitriptyline and Gabapentin,
- (PCA bolus 10 mg per bolus)
- Methadone was not available
- Discharged home with portable PCA, managed at home by his daughter who just graduated from nursing college
Portable PCA

- Special delivery device
- Patient has to press the button on demand
- The machine was loaned to him
- As the pain was unbearable at home, he eventually agreed for continuous intrathecal morphine infusion with good pain relief
- He passed away about 2 months later in ward
Case 3

- S.O. 67 y.o Malay lady
- Advanced Ca rectum with metastases to the spine and lumbar plexus, complicated with bedsore
- c/o severe low back and thigh pain
- T. Morphine 40 mg bd made her too sleepy but pain still not well controlled, especially during dressing and sponging
- Proceeded with tunnelled epidural analgesia
- After 1/12 changed to continuous intrathecal opioid infusion
Disposable PCA/PCIA

- Patient requested to go home for granddaughter’s wedding.
- She lived about 150 km away from KualaTerengganu
- In preparation for the discharge, she was put on disposable PCIA
Case 3: Preparation for discharge

- Liaised with nearest clinic for homecare visit
- Family conference together with district family physician and MO in-charge
- The hospital driver will fetch the drug preparation every 3rd day
- She was discharged home and was visited by the home service
- Unfortunately, the intrathecal catheter slipped out after 1 week
- She was readmitted and was prescribed fentanyl patch 75 mcg/hr
- She passed away a week later
Training program
Conclusions

- Cancer pain is often complex and difficult to treat
- It is even more challenging when managing this pain in the community
- Management should be patient-centred with involvement of the family and carers
- Coordination and collaboration between the health professional and NGO is imperative
- Training and education programme at different level in the community
What is your role?
Principles to move on...

- Do more with less
- Start now- a journey must start with a step
- Be creative
- Do it with your heart
- Everyday is a learning process
- Experience makes you communicate better with confidence
Thank You