FOREWORD

Broadly understood as “an unpleasant sensory or emotional experience associated with actual or potential tissue damage “pain affects not only the physical, mental, emotional and spiritual aspects of the patient’s life but that of the family as a whole.

The demand for chronic care service has increased with the associated morbidity due to Acquired Immune Deficiency Syndrome (AIDS) in many developing countries including Ethiopia. Chronic pain has, thus, evolved as a major public health concern. Cognizant of this, the Federal Ministry of Health (FMOH) had issued a National Pain Management Guideline in 2006 with the objective of among others “ensuring the safety and effectiveness of pain management” for use by the health care providers at all levels of the health care delivery system.

A systematic assessment of the ongoing pain management practices that was conducted by EPHA in 2007, which was the first of its kind in the country, has generated a wealth of information on the important areas of the knowledge, attitude and practice related to pain assessment and management among health workers (found to be poor), the emphasis given to pain management in the pre-service training in medical schools; (low), the availability, storage, and prescription of different pain management drugs, barriers to the proper management of pain by health care workers etc.

The evaluation also forwarded a set of pertinent recommendations. The Ethiopian Public Health Association (EPHA) opted for addressing the recommendation on “improving the knowledge and practice of service providers in pain management.” EPHA followed the strategy of developing participants’ manual on pain management for use of health care providers. For this purpose, EPHA engaged the services of a team of qualified consultants to develop the participants’ manual and facilitator’s guide.

The draft manuals were used as training material at a national level ToT organised for selected prospective trainers from five universities for the dual purpose of strengthening the training on pain management and building a critical mass of experts at each university and getting input for updating the draft manuals.

Cascade training was also conducted in the five universities for trainees selected by each university from multidisciplinary sectors (physicians, specialist, pharmacists, nurses etc). The manuals were reviewed at national workshop organized by EPHA, peer reviewed by professionals in the field and finally endorsed by the FMOH.

EPHA believes that the training manuals are timely and will definitely contribute towards improving the practice and teaching on pain management.
APPROVAL OF THE TRAINING MATERIAL

The Federal Ministry of health of Ethiopia has been working towards standardization and institutionalization of in-service (IST) trainings at national level. As part of this initiative the ministry developed a national in-service training directive and implementation guide for the health sector. The directive requires all in-service training materials fulfill the standards set in the implementation Guide. Accordingly, the ministry reviews and approves existing training materials based on the IST standardization checklist annexed on the IST implementation guide. All in-service training materials shall to be reviewed and approved by the ministry accordingly; as part of the national IST standardization process, these Managing Pain IST material has been reviewed based on the standardization checklist and approved by the ministry in August 2014.

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<tr>
<td>AAU</td>
<td>Addis Ababa University</td>
</tr>
<tr>
<td>ABC</td>
<td>Abacavir</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>APCA</td>
<td>African Palliative Care Association</td>
</tr>
<tr>
<td>APV</td>
<td>Amprenavir</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>ATV</td>
<td>Atazanavir</td>
</tr>
<tr>
<td>AZT</td>
<td>Zidovudine</td>
</tr>
<tr>
<td>CD4</td>
<td>Cluster of Differentiation 4</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Prevention and Control</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>D4T</td>
<td>Stavudine</td>
</tr>
<tr>
<td>DDI</td>
<td>Didanosine</td>
</tr>
<tr>
<td>EFV</td>
<td>Efavirenz</td>
</tr>
<tr>
<td>FLACC</td>
<td>Faces, Legs, Activity, Cry, Consolability [Scale]</td>
</tr>
<tr>
<td>FMoH</td>
<td>Federal Ministry of Health</td>
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<tr>
<td>GI</td>
<td>Gastro-intestinal</td>
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<tr>
<td>GORD</td>
<td>Gastro-oesophageal reflux disease</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>hrly</td>
<td>Hourly</td>
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<tr>
<td>hrs</td>
<td>Hours</td>
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<tr>
<td>IAHPC</td>
<td>International Association of Hospice and Palliative Care</td>
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<tr>
<td>IASP</td>
<td>International Association for the Study of Pain</td>
</tr>
<tr>
<td>IDV</td>
<td>Indinavir</td>
</tr>
<tr>
<td>IM</td>
<td>Intramuscular</td>
</tr>
<tr>
<td>INCB</td>
<td>International Narcotics Control Board</td>
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<tr>
<td>INH</td>
<td>Isoniazid</td>
</tr>
<tr>
<td>IRIS</td>
<td>Immune Reconstitution Inflammatory Syndrome</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenously (or iv)</td>
</tr>
<tr>
<td>kg</td>
<td>Kilogram</td>
</tr>
<tr>
<td>LP</td>
<td>Lumbar puncture</td>
</tr>
<tr>
<td>LPV/r</td>
<td>Lopinavir/r</td>
</tr>
<tr>
<td>MAC</td>
<td>Mycobacterium Avium Complex</td>
</tr>
<tr>
<td>max</td>
<td>Maximum</td>
</tr>
<tr>
<td>mcg</td>
<td>Microgram</td>
</tr>
<tr>
<td>mg</td>
<td>Milligram</td>
</tr>
<tr>
<td>MST</td>
<td>Morphine sulphate tablets</td>
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<tr>
<td>NFV</td>
<td>Nelfinavir</td>
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<tr>
<td>NIPS</td>
<td>Neonatal Infant Pain Scale</td>
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<tr>
<td>NSAID</td>
<td>Non-steroidal anti-inflammatory drug</td>
</tr>
<tr>
<td>NVP</td>
<td>Nevirapine</td>
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<tr>
<td>OI</td>
<td>Opportunistic infection</td>
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<tr>
<td>PAINAD</td>
<td>Pain assessment in advanced dementia</td>
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<tr>
<td>PC</td>
<td>Palliative care</td>
</tr>
<tr>
<td>PO</td>
<td>Per Os (by mouth, orally)</td>
</tr>
<tr>
<td>POS</td>
<td>Palliative outcome scale</td>
</tr>
<tr>
<td>PR</td>
<td>Per rectum</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>RTV</td>
<td>Ritonavir</td>
</tr>
<tr>
<td>SC (or sc)</td>
<td>Subcutaneous</td>
</tr>
<tr>
<td>SQV</td>
<td>Saquinavir</td>
</tr>
<tr>
<td>TVP</td>
<td>Touch Visual Pain [Scale]</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNAIDS</td>
<td>Joint UN Programme for HIV/AIDS</td>
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<tr>
<td>VAS</td>
<td>Visual Analogue Scale</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>WPCA</td>
<td>Worldwide Palliative Care Alliance</td>
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PREFACE

"We must all die. But that I can save (a person) from days of torture, that is what I feel as my great and even new privilege. Pain is a more terrible lord of mankind than even death itself."
(Albert Schweitzer —1875-1965 Alsatian physician theologian, musician, philosopher)

In Ethiopia, inadequate pain management is condemning thousands to painful living and agonizing, undignified deaths. Patients who are in pain, whether it is acute, post-operative, chronic non-malignant, cancer or HIV/AIDS-related are not receiving adequate and appropriate analgesics to relieve their pain. Pain can have a negative effect on the patient's health and quality of life resulting in needless suffering, emotional distress, loss of productivity and possibly slower recovery from illnesses, injuries, and diseases. World Health Organization’s (WHO) study found that people who live with chronic pain are four times more likely to suffer from depression or anxiety. The physical effect of chronic pain and the psychological strain it causes can even influence the course of the disease. Most patients with chronic pain do not sleep at night, which makes them tired in the subsequent days leading to more pain, depression and irritability, loss of appetite and malnutrition. Physical and mental activity of any type becomes tiring and may aggravate the pain. Specialists in the field call the situation the “terrible triad” of suffering, sleeplessness and sadness, a tragedy that affects the patient and the family. According to WHO pain can kill. While physical, psychological, and social consequences of pain may be measurable, the suffering caused by pain is not. Yet, there can be little dispute about the enormity of the misery it inflicts. The cost of pain, if measured in human suffering, in wasted potential, and in medical care cost is tremendous.

Professional focus has often been on treatment, the curing of disease - without addressing the care of the suffering and the pain that goes along with the disease and treatment. With the huge burden of cancer and HIV among other life limiting illnesses in Ethiopia, there is a clear public health argument for promoting quality of pain management to maximize clinical benefit from available treatments, and to ensure relief from unnecessary sufferings. People should not live or die with uncontrolled pain because of unrealistic fears and wrong beliefs of available treatments.

Palliative care is distinguished from supportive care in progressive diseases by its clinical dimensions, specifically pain and symptom control. As defined by WHO, palliative care is concerned with the assessment and management of pain and symptoms among patients with life limiting illnesses and it embraces physical, emotional and spiritual pain. The President’s Emergency Plan for AIDS Relief (PEPFAR) supports WHO’s definition of palliative care and has included it as a key component in all PEPFAR supported HIV care, treatment, and support programs. Affordable and culturally appropriate models in resource-constraint settings have demonstrated the feasibility of providing pain and symptom relief including safe, effective, and inexpensive opioid treatment.
Course overview:

Need assessment and rationale

Pain management is one of the very challenging areas of medical practice. Mismanagement of pain and patient dissatisfaction are common. The demand for chronic care service has increased with the associated morbidity due to AIDS in many developing countries including Ethiopia. A national guideline on pain management has been prepared under the auspices of the FMoH and made operational since 2007. A systematic assessment of the ongoing pain management practices was conducted by EPHA and the finding endorsed by the FMoH and published. The study had the objectives of assessing the:

- knowledge, attitude and practice related to pain assessment and management by health workers practicing at different levels of health care facilities;
- Emphasis given to pain management in the pre-service training in medical schools and evaluate the availability, storage, and prescription of different pain management drugs in facilities.

The evaluation had four components: health workers survey, medical school survey, pharmacy survey, and desk review and synthesis and conducted in selected facilities in all regions of Ethiopia. A total of 673 health workers, 132 pharmacy professionals and 38 medical school staff participated in the study.

Highlight of the findings:

- Drug therapy was almost the only/ popular pain management modality practiced by 97.6% (657).
- Only 30.6% (206) were aware of the important pain assessment scales;
- Only 28 % (187) were aware of the national pain management guideline while 23.5% (158) knew the WHO protocol for pain management.
- 90% (320) nurses, 83.2 % (79) health officers, 76.2% (115) GPs and 79.7 %( 55) of specialists had never used the national pain management guideline.
- 79.5% (534) had no other pain management guideline in their health facility and 82.4% (554) had never used the WHO protocol.
- Simple analgesics were the most frequently prescribed drugs by 85.6% (576) of health workers, while strong opioids were never prescribed by 55.4% (373) of health workers.
- While simple analgesics were available in more than 80% of pharmacies, strong opioids such as morphine were available in only 19.8 % (25) -pharmacies.
- In the health service facilities, 68.4% (457) said there was no pain specialist or trained person.
- About 50% reported referring patients for further pain management.
Regarding the training on pain management,

- Lack of knowledge {63.6% (482)} or appropriate training, {93% (626)} was the important perceived barrier to the proper management of pain in health facilities.
- None of the medical schools clearly showed pain management as a major component of the curricula and
- Medical school instructors are neither well trained nor aware of the national and WHO guidelines for pain management.

Recommendation
- Improve the current knowledge and practice of service providers in pain management through on-the-job training by involving health training institutes and providing basic job aids.
- Popularize and ensure the availability and use of the Standard protocols including the national pain management guideline by all health workers, pharmacy professionals, and health training schools.
- Update the curriculum and course outline on pain management in medical schools and other training facilities
- Ensure the availability of a full range of pain drugs in the health facilities
- Strengthen the system of pain drug procurement, distribution and storage and thereby ensure the continuous availability of quality drugs.

Recommendations addressed by this training module

- Improve the current knowledge and practice of service providers in pain management through on-the-job training by involving health training institutes and providing basic job aids.

Training goal:

To impart holistic approach to pain management among the multidisciplinary team consisting of the Medical doctor, Nurse and pharmacist.

General learning objectives:

At the end of the training, the participants will be able to;
- Describe the magnitude of pain and its impact on patients, families’ health care providers and the health care institutions
- Describe pathophysiologic mechanisms and classification of pain.
- Apply the knowledge acquired to comprehensively assess pain and arrive at classification and treatment decision
- Apply the principles of pharmacologic method of pain management.
• Analyze the pharmacokinetics and pharmacodynamics of morphine.
• Select appropriate non pharmacological approaches of pain management and apply or refer according to relevance to individual patients.
• Communicate with patients effectively and with compassion.
• Understand the special considerations in pain management in HIV/AIDS, cancer, the elderly and in end-of-life care.
• To describe the basic principles of the restriction and regulations on opioid, prescription, and utilization.

Competencies

The objectives of this course are to offer basic information and introductory skills in pain management to health workers and develop the following ten competencies:

1. Application of the concepts and principles of pain management
2. Taking and documenting patient pain history
3. Assessing and managing physical pain according to the WHO protocol
4. Acquiring knowledge skills, and confidence in the use of opioids particularly oral morphine for pain management
5. Assessing and managing the psychosocial, spiritual, and cultural dimensions of pain.
6. Describing the issues of pain management in cancer, HIV/AIDS, in children, the elderly and end-of-life
7. Communicating with patients and their families and providing ethical, patient-centered care.
8. Describing the national and international guidelines, policies, conventions as pertains to pain management and opioid availability.
9. Recognizing the importance of effective management of pain and appreciating the role of evidence and advocacy for the sustainability of pain management and palliative care
10. Recognizing the importance of working as team for effective pain management

Facilitators’ qualification and requirement

A trainer should be selected based on the following criteria:

• Post-test and teach back score (TOT score) of >80%
• A physician who scores the above will be able to facilitate the entire course to all health professionals.
• Nurses who score the above would be able to facilitate only to their respective professionals except in the area of communication
• Pharmacists would be able to facilitate only to their respective professionals except in the area pharmacology and drug policy for pharmacists
Target audience for the training

- Participants are primarily health workers - physicians, health officers and nurses and pharmacists. They may be working as health care professionals for government or non-governmental organizations (NGOs).
- A one day or three days course can be conducted for other multidisciplinary team members by selecting and adjusting the Managing Pain Participants’ Manual. Those with some background in PC-related subjects are often at an advantage.

Suggested course composition and participants selection criteria:

The group size for this pain management training should not exceed 15 participants. An ideal number is between 12 to 15. The smaller the group, the more quality time, and opportunities are afforded for participants to practice their skills.

The participants for this course should be health care providers currently working in a facility or supervising a facility where pain management services are provided or are planned to be initiated.

Trainees should demonstrate an interest and enthusiasm to learn more about pain management and palliative care and have the ability to integrate and develop these services in their own setting.

The curriculum can also be delivered to a multi-disciplinary team of health care providers operating at all levels (primary, secondary and tertiary) and settings of care (e.g. hospitals, home-based care, health centers and dispensaries). It can be adapted to suit trainees with a range of educational backgrounds. However, to support in the delivery, it is recommended that trainees in any one of the courses be of a similar educational background.

Course duration: It is 5 day training course. The sessions are full-day sessions which start at 08h30 and end at 16h15. A lunch break and two tea breaks are included. The core pain management curriculum is 3 full days while 2 days is for teaching skills and teach back practice.

Course Design: Managing the pain training package is designed to prepare service providers (physicians, health officers, nurses, and pharmacists) to provide sound pain management in their health facilities and communities. The course builds on each participant’s past knowledge and takes advantage of the individual’s high motivation to accomplish learning tasks in the minimum time. Although an introductory course in palliative care will be conducted, this course is not intended to provide training in other clinical skills relevant to PC provision.

Training methods and tools: This training course differs from traditional courses in several ways, as described below. The teaching methods of this course are based on several assumptions about learning:

- Performance-based instruction-Facilitators will teach the health workers about tasks they will be expected to do on the job. This course is developed based on an analysis of tasks
involved in managing pain both at the clinic and at home. Each section of the training addresses the knowledge and skills needed to perform these steps.

- Active participation increases learning—This course fully involves participants on the basis that learning is facilitated by practice. This course involves the participants via written exercises, group discussions, drills, role plays, skills stations, and if possible clinical practice.
- Immediate feedback increases learning—Feedback is information given to a participant on how well he/she is doing and motivates learning. Immediate feedback allows misunderstandings to be corrected before they become beliefs. In this course, immediate feedback is given for each exercise, and tailored to participants' needs. Feedback is proved through individual consultation or group discussion.
- Learning is increased when instruction is individualized—For maximum learning to occur, instruction must be flexible enough to allow each participant to proceed at a comfortable pace. Each participant should ask questions and receive explanations to the extent necessary for him/her to understand and acquire knowledge and skills.
- Positive motivation is essential for learning—Motivation has to be kept high during the course by providing individual attention, giving prompt feedback, reinforcing participants for their work, ensuring that each exercise is understood and encouraging group activities and clinical practice.

The role of the trainer is to:

- Help trainees gain knowledge
- Help trainees apply knowledge
- Show trainees the skills they will need
- Help trainees practice the necessary skills correctly
- Provide opportunities for problem solving
- Help trainees develop self-awareness and insight into their role

1. Teaching methods: The trainers will use a variety of adult learning training methods such as

- Interactive presentations
- Small group exercises
- Demonstrations and “skill stations”
- Role plays
- Case studies
- Brainstorming and
- Discussions

2. Organization of the training: The trainer will organize the training as follows:

- Introductory talk or power point presentation
- Written exercises
- Demonstrations
- Pictorial clinical exercises
- Drills
- Role Plays
- Simulations videos
Managing Pain - facilitator’s guide

- Skill stations
- Case studies
- Evaluation

Overview of exercises

1. Written clinical exercises
   1. Detect pain type and grade pain
   2. Choose the type of medications
   3. Choose the dose: decide dose, dose tapering
   4. How to go up and down the analgesic ladder
   5. How to combine medications
   6. When to give morphine
   7. Morphine dosages
   8. How to fill in morphine records
   9. Where to store morphine
   10. Morphine side effect prevention/management
   11. Special pain management
   12. Education of care givers

2. Drills
   1. Pain management 1
   2. Pain management 2
   3. Pain management 3
   4. Morphine indications
   5. Morphine side effects
   6. Morphine record keeping and safe storage

3. Demonstrations
   1. Morphine dosing: How to convert mg to ml
   2. How to draw morphine from the bottle into a syringe
   - Pictorial clinical exercises (photo or drawings)
   - Videos and simulations (followed by written exercises or group discussion)
   - Life before death series will be streamed followed by discussions
   - Simulations: How the health worker should communicate with patient and family (the video will demonstrate good and bad ways to communicate)

4. Role plays (will be performed with one health worker, one care giver/patient, one observer)
   - Pain management (including use of morphine)
   - Educate health workers in communication
   - Educate caregiver in pain management (including use of morphine)
   - Educate caregiver in moving the patient
   - End of life psychological support to patient and family within local culture
   - How to encourage patient self-management

5. Mock patients or "expert" patients
   - HIV patient with weight loss, diarrhea, nausea and vomiting, anorexia and abdominal cramps and signs of dehydration
   - Patient with breast cancer in severe pain
6. **Skill stations**
   How to draw up oral morphine solution

**Course Materials:** There are three main modules sub divided in to ten units. Each Unit in Managing Pain **PARTICIPANTS’ MANUAL** has a lesson plan showing the main points to be covered and a guide of the timing in the schedule (see schedule). Participants will refer to the relevant pages during the training. The more familiar the participant becomes with the participant manual, the more they will be able to use it as a reference book after the course. The trainer will direct participants to which page or unit to turn to follow and read during the course.

Almost all the important learning points are in the Participants’ manual. Participants will not need to write many notes. However, if they need to add additional notes for future reference they will find two pages of lined paper at the end of each module to note them down.

Health workers are encouraged to pursue additional training to expand their expertise available to them. A list of selected references is also given at the end of Participants’ manual for participants’ further reading.

1. **Participants’ Manual:** Participants’ manual has three main modules which are further sub divided in to ten units. It contains all important learning points and is the main reference material for the course.

2. **Managing Pain Facilitator’s Guide** is another companion to Managing Pain Participants’ manual. The guide is for the trainer, not the participants and must be used alongside the participants’ manual because all the learning material is not repeated in the manual. It describes the trainer’s role in course planning and offers the trainer directions to conduct each session. It contains introduction and course information, course schedule, general suggestions for teaching the course, outlines specific suggestions for teaching each module and activities including exercises, role plays, brainstorming, and case studies by individual module. The modules can be used as single sessions on specific topics, or put together to create courses. Courses can be made to suit different audiences by choosing the modules which are relevant in each situation.

Managing Pain Facilitator’s Guide is not a comprehensive ‘training of trainers’ manual. The manual is meant to be a guide and can be adapted to suit your own situation. You may already be an experienced teacher and can use that experience and skill, bringing in your own stories and case studies. The first section, is not part of the teaching material, but is an introduction to adult learning for trainers and explains how to use the different teaching methods in the manual.

3. **Standardized** Power point slides sets, simulations,
4. **Handouts** of relevant publications and information for future reference and home reading.
5. **Job Aid:** A desk reference for pain management drugs and dosages as a handy reference.
6. **Wall Charts** that can be posted in the health care facility for ready reference such as treatment algorithms, advocacy messages etc.
Managing Pain-facilitator’s guide

10-Checklist of supplies needed for work and modules
Materials needed for the training include:
- A nametag and a tag holder
- 2 pens
- 2 pencils with erasers
- Packets of paper
- Highlighters
- Folders or large envelopes to collect answer sheets
- Large paper clips (helpful to mark place in the module when doing exercises)
- A stapler with staples
- 1 roll of masking tape
- Extra pencils and erasers
- Flipchart pads and markers or blackboard and chalk
- LCD or overhead projector (if possible) and erasable markers to write on overheads
- Lap top
- Whiteboard

Checklist of instructional material needed in each small group
- Managing Pain: Participants modules 1, 2 and 3 (one set for each participant and facilitator).
- Managing Pain: Facilitator’s guide (1 for each facilitator)

Methods of evaluation
During the morning of the first day of the course, participants demonstrate their knowledge attitude and skills in pain management by completing a written test (Pre-test Questionnaire) and fill out a pre-course confidence rating scale. In addition participants’ skills in problem solving are assessed throughout the course.

Rapid pre and post-test evaluation (Knowledge, Attitude and Practice test, KAP).
Knowledge, attitude, and practice are the three pillars of excellence and wisdom. The main purpose of this rapid KAP pre-test assessment is to explore the existing KAP prior to training and changes in KAP post the training. KAP assessment will give us an indication what the health workers in the training session know about pain management, how they feel, and also how they behave. You may revise these questions as needed by using the resources that are included True/False, multiple choice, open ended etc.
End of course test/Post-test result will be compared with the Pre-test baseline findings. Progress in knowledge and skill base is measured at the end of the course using standardized written test (Post-test Questionnaire) and post course confidence rating. Successful completion of the course is based on the mastery of the content of the course. Afterwards, go through all the answers together – this can be a useful way of clearing up misunderstandings and clarifying important points. This should be seen as an opportunity for positive feed-back and as chance to discuss problems.
If you have not used all the modules, you will need to take out the questions relating to those modules. Summary evaluation at the end of the course can also take the form of a written examination and a case study.

Confidence rating scale will be done before the course begins and again repeat the confidence rating test at the end of the course. Comparing the results will give you an idea of how effective the course has been in terms of boosting the confidence of trainees in the subject matter. Have a copy of the confidence rating scale or ask participants to turn to tool which is in both in Facilitator’s guide – give them five minutes to fill it in. Explain to trainees that what you as trainers would like to accomplish along with their participation is increase their true confidence scale by empowering them with a heightened awareness, knowledge and skills. Ask them to be very honest with their answers. You may add more questions to this!

3. Evaluation of the course will be conducted daily at the end of the course day. The participants will complete another overall course evaluation at the end of the course. Make time for participants to fill this at the end of each day and on the last day, e.g. before the test or before certificates are presented. Ask them to be honest and give them 10 minutes to do it.

   Participant evaluation
   
   • Pre- and post-training tests knowledge questionnaires
   • Self-perception and confidence pre and post tests

   Course evaluation
   
   • Course evaluation (to be completed by each participant) (see appendices)

4. Follow up Interview/ questionnaire at follow-up in the workplace at a pre-set interval after training and/or close monitoring.

Trainers are encouraged to collect copies of all relevant national and if possible key international guidelines, recommendations and conventions as pertains to Palliative Care symptom management particularly pain management and “opioid availability” legislation and regulations as reference during the course. Hands-on training is strongly recommended. Where feasible complementary on site or offsite clinical training especially in the following areas will greatly improve the capacity of health care workers to use their knowledge and skills.
Training Schedule

1. Suggested course schedule for TOT

### Schedule Day 1

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Registration of trainees</td>
<td>Organizers</td>
</tr>
<tr>
<td>9:00-9:15</td>
<td>Welcoming and keynote address</td>
<td>Speaker/s’ name/s</td>
</tr>
<tr>
<td>9:15-9:30</td>
<td>Pre-training knowledge, attitude and practice evaluation</td>
<td>Facilitators</td>
</tr>
<tr>
<td>9:30-9:45</td>
<td>Setting the agenda</td>
<td>Facilitators</td>
</tr>
<tr>
<td>9:45-10:45</td>
<td>Baseline evaluation of Pain management practices and teaching in health facilities and training schools in Ethiopia</td>
<td>Training Sponsor’s representative</td>
</tr>
</tbody>
</table>
| 10:45-11:45  | **Unit 1**
Introduction, magnitude of problem of pain                     | Trainer’s name               |
| 11:45-12:15  | **Unit 1**
Model of care - Palliative Care                                | Trainer’s name               |
| 12:15-12:30  | Exercise, questions and discussion                             | 75 minutes                   |
| 1:30-2:30    | **Unit 2:**
Pathophysiology of pain                                         | Trainer’s name               |
| 2:30-3:00    | Exercise, questions and discussion                             |                              |
| 3:00-3:15    | Tea/coffee break                                              | Organizers                   |
| 3:15-4:30    | **Unit 2**
Classification of pain                                          | Trainer’s name               |
| 4:30-5:00    | Exercise, questions and discussion                             | 135 minutes for unit 2       |

### Schedule Day 2

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:30</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
</tbody>
</table>
| 8:30-9:45    | **Unit 3**
Assessment of pain                                         | Trainee’s name              |
<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:45-10:30</td>
<td>Exercise, questions and discussion</td>
<td></td>
</tr>
<tr>
<td>10:45-11:30</td>
<td>Exercise, Questions and discussion</td>
<td>45 minutes for Unit 3</td>
</tr>
<tr>
<td>11:30-12:30</td>
<td><strong>Unit 4</strong> Pharmacologic management of pain,</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>1:30-2:30</td>
<td>Exercise, Questions and discussion</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>2:45-3:30</td>
<td><strong>Unit 4</strong> Principles of management of pain ,part 2</td>
<td></td>
</tr>
<tr>
<td>3:30-4:00</td>
<td>Tea/coffee break</td>
<td>Organizers</td>
</tr>
<tr>
<td>4:00-5:30</td>
<td>Exercise, questions and discussion</td>
<td>90 minutes for Unit 4</td>
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</table>

**Schedule day 3**

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
<tr>
<td>9:00-10:00</td>
<td><strong>Unit 5</strong> Morphine and other Opioids</td>
<td></td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Question and discussion</td>
<td></td>
</tr>
<tr>
<td>10:45-12:00</td>
<td><strong>Unit 5</strong> Morphine and other opioids, use in pain management</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>Exercise, questions and discussion</td>
<td>30 minutes for Unit 5</td>
</tr>
<tr>
<td>1:30-2:00</td>
<td><strong>Unit 6</strong> Non pharmacological management of pain unit</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Exercise, questions and discussion</td>
<td>15 minutes for Unit 6</td>
</tr>
<tr>
<td>2:15-3:15</td>
<td><strong>Unit 7</strong> Management of Psychosocial, spiritual and cultural pain communications</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Exercise, questions and discussion</td>
<td>15 minutes for Unit 7</td>
</tr>
<tr>
<td>3:45-4:45</td>
<td><strong>Unit 8</strong> Special considerations in pain, pediatric</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>4:45-5:30</td>
<td><strong>Unit 8</strong> Special considerations in pain: cancer, elderly</td>
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### Schedule day 4

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<th>Timeframe</th>
<th>Activity</th>
<th>Responsibility</th>
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</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
<tr>
<td>9:00-9:30</td>
<td>Discussion on unit 8</td>
<td>30 minutes for Unit 8</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td><strong>Unit 9</strong> National and international policies and regulations affecting pain management Exercise</td>
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</tr>
<tr>
<td>10:45-11:15</td>
<td><strong>Unit 9</strong> National and international policies and regulations affecting pain management Exercise</td>
<td></td>
</tr>
<tr>
<td>11:15-11:45</td>
<td>Exercise, questions and discussion</td>
<td>30 minutes for Unit 9</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td><strong>Unit 10</strong> Effective teaching of pain management</td>
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</tr>
<tr>
<td>1:30-3:00</td>
<td><strong>Unit 10</strong> Effective teaching of pain management</td>
<td></td>
</tr>
<tr>
<td>3:15-4:45</td>
<td>Teaching methods Discussion</td>
<td>30 minutes for Unit10</td>
</tr>
<tr>
<td>4:45-5:30</td>
<td>Panning your advocacy and cascade teaching &amp; discussion ,Group work</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>


### Schedule day 5

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Activity</th>
<th>Responsibility</th>
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</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
<tr>
<td>9:00-9:30</td>
<td>Teach back session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'peripheral and central sensitization'</td>
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</tr>
<tr>
<td>9:30-9:45</td>
<td>Comments on teaching skill</td>
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</tr>
<tr>
<td>9:45-10:15</td>
<td>Teach back session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Holistic assessment of pain'</td>
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</tr>
<tr>
<td>10:15-10:30</td>
<td>Comments on teaching skill</td>
<td></td>
</tr>
<tr>
<td>10:45-11:15</td>
<td>Teach back session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Principles of pain management '</td>
<td></td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Comments on teaching skill</td>
<td></td>
</tr>
<tr>
<td>11:30-12:15</td>
<td>'Opioids for pain management'</td>
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</tr>
<tr>
<td>12:15-12:30</td>
<td>Comments on teaching skill</td>
<td></td>
</tr>
<tr>
<td>1:30-2:00</td>
<td>Teach back session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>'pain in HIV/AIDS'</td>
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<tr>
<td>2:00-2:15</td>
<td>Comments on teaching skill</td>
<td></td>
</tr>
<tr>
<td>2:15-2:45</td>
<td>Teach back session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communications skill</td>
<td></td>
</tr>
<tr>
<td>2:45-3:00</td>
<td>Comments on teaching skill</td>
<td></td>
</tr>
<tr>
<td>3:15-4:00</td>
<td>Conclusion</td>
<td></td>
</tr>
<tr>
<td>4:00-4:15</td>
<td>Post test</td>
<td></td>
</tr>
<tr>
<td>4:15-4:30</td>
<td>Course evaluation</td>
<td></td>
</tr>
<tr>
<td>4:30-4:15</td>
<td>Closing remark</td>
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</table>
## 2-Managing Pain Cascading & Advocacy training

### Schedule Day 1

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
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</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Registration of trainees</td>
<td>Organizers</td>
</tr>
<tr>
<td>9:00-9:15</td>
<td>Welcoming and key note address</td>
<td>Speaker(s) name</td>
</tr>
<tr>
<td>9:15-9:30</td>
<td>Pre-training knowledge, Attitude and practice evaluation</td>
<td>Facilitators</td>
</tr>
<tr>
<td>9:30-9:45</td>
<td>Setting the agenda</td>
<td>Facilitators</td>
</tr>
<tr>
<td>9:45-10:15</td>
<td>Baseline evaluation of Pain management practices and teaching in health facilities and training schools in Ethiopia</td>
<td>Sponsor's representative</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Pre training test</td>
<td></td>
</tr>
<tr>
<td>10:45-11:45</td>
<td>Unit 1: Introduction, magnitude of problem of pain</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>11:45-12:15</td>
<td>Unit 1: model of care, Palliative care</td>
<td>Trainer's name</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Exercise, Questions and discussion</td>
<td>15 minutes</td>
</tr>
<tr>
<td>1:30-2:30</td>
<td>Unit 2: Pathophysiology of pain</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>2:30-3:00</td>
<td>Exercise, questions and discussion</td>
<td></td>
</tr>
<tr>
<td>3:00-3:15</td>
<td>Tea/coffee break</td>
<td>Organizers</td>
</tr>
<tr>
<td>3:15-4:30</td>
<td>Unit 2: classification of pain</td>
<td>Trainer's name</td>
</tr>
<tr>
<td>4:30-5:00</td>
<td>Exercise, questions and discussion</td>
<td>30 minutes for Unit 2</td>
</tr>
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</table>

### Schedule Day 2

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:30</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
<tr>
<td>8:30-9:45</td>
<td>Unit 3: Assessment of pain</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>9:45-10:30</td>
<td>Exercise, questions and discussion</td>
<td></td>
</tr>
<tr>
<td>10:45-11:30</td>
<td>Exercise, questions and discussion</td>
<td>45 minutes for Unit 3</td>
</tr>
<tr>
<td>11:30-12:30</td>
<td>Unit 4: pharmacologic management of pain, part 1</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>1:30-2:30</td>
<td>Exercise, Questions and discussion</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>2:45-3:30</td>
<td>Unit 4: principles of management of pain, part 2</td>
<td></td>
</tr>
<tr>
<td>Time Frame</td>
<td>Activity</td>
<td>Responsibility</td>
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</tr>
<tr>
<td>3:30-4:00</td>
<td>Tea/coffee break</td>
<td>Organizers</td>
</tr>
<tr>
<td>4:00-5:30</td>
<td>Exercise, questions and discussion</td>
<td>90 minutes for Unit 4</td>
</tr>
</tbody>
</table>

**Schedule Day 3:**

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Recapitulations session</td>
<td>Two assigned trainees</td>
</tr>
<tr>
<td>9:00-10:00</td>
<td><strong>Unit 5:</strong> Morphine and other opioids</td>
<td></td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Question and discussion</td>
<td>30 minutes for Unit 2</td>
</tr>
<tr>
<td>10:45-12:00</td>
<td><strong>Unit 7:</strong> Management of Psychological, spiritual and cultural pain, Communications</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td></td>
<td></td>
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<tr>
<td>1:30-2:00</td>
<td><strong>Unit 8:</strong> Non Pharmacological management of pain Unit</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>2:00-2:15</td>
<td>Exercise, questions and discussion</td>
<td>15 minutes for Unit 6</td>
</tr>
<tr>
<td>2:15-3:15</td>
<td>Special considerations in pain,</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Exercise, questions and discussion</td>
<td>15 minutes</td>
</tr>
<tr>
<td>3:45-4:45</td>
<td><strong>Unit 9:</strong> National and international policies and regulations affecting pain management exercise</td>
<td>Trainer’s name</td>
</tr>
<tr>
<td>4:45-5:00</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>5:00-5:30</td>
<td>Course evaluation and post test</td>
<td></td>
</tr>
<tr>
<td>5:30</td>
<td>Conclusion</td>
<td>Organizer</td>
</tr>
</tbody>
</table>
Opening Chapter: Introductions and setting the agenda

- This session is for use at the start of a course – you may not need to use it for a one-day program, or you could use a shortened version.
- Introductions: go around the room and ask each person to introduce themselves – names, where they work etc.
- Ice-breakers: you could use some ‘ice-breakers’ to get people talking and interacting with each other.

Expectations

ASK PARTICIPANTS TO CALL OUT THEIR EXPECTATIONS OF THE COURSE – WHY THEY HAVE COME, WHAT THEY ARE HOPING TO LEARN ETC. and write it on the flip chart

Write these up on the flipchart.

Ground rules

ASK PARTICIPANTS TO SUGGEST GROUND RULES FOR THE COURSE AND WRITE THEM UP. THESE SHOULD INCLUDE:

- Confidentiality and mutual respect (e.g. listening when others are talking, not interrupting)
- Share responsibility for learning (e.g. helping fellow participants, taking part in group work, allowing others to speak)
- Always ask if you do not understand
- Turn off mobile phones
- Punctuality
Leaders within the group:
It may be helpful for the participants to nominate/elect leaders who can represent the participants during the course, e.g. chairman, secretary, time-keeper.

Housekeeping:
Explain the arrangements for meals and refreshments, toilets and other administrative details. If you plan to take a register every day, explain how this will be done.

Introducing Managing the Pain Participants’ Manual:
The course uses the Managing Pain Manual throughout. It is hoped that participants will become familiar with it so that they will continue to use it after the course to find information and resources to help them in their work. Distribute Managing Pain Participants’ Manual. Explain briefly the Managing Pain Participants' Manual and explain how to use it. Explain exercises, demonstrations, skill stations.

Get everyone to look through it together so they can begin to find their way around its sections. Encourage the participants to use it during the course, looking things up during the sessions. They will find almost all of what is being taught in the manual, so they should not need to take many notes.

Teaching methods:

Explain that the course will use a variety of teaching methods, some of which they may not be familiar with. Most of the course uses participatory methods rather than lectures. These methods help people to remember what they have learned, and enable them to learn from one another.

Training participants learn best when they feel comfortable in the environment in which they learn. The trainers should apply the following to create a safe environment where the participants feel comfortable to be part of the learning process.

- Link training activities to what people do at their work. Link training sessions to the participants’ real-life experiences using a variety of learning methods.
- Keep their teaching techniques simple but diverse and use interactive methods to help maintain participants’ interest and involvement in the learning process.
- Recognize the participants’ individuality and provide them with opportunities to contribute to the training sessions/discussions.
- Treat everyone with respect, thus setting an example to the participants.
- Provide positive feedback.
- Provide corrective/constructive feedback when necessary, taking care not to embarrass the participants while doing so.
- Before starting the first session, trainers should introduce themselves and should also allow the participants to introduce themselves.
Reviewing the Day’s Activities

Review of the day’s activities helps to elicit feedback from the participants and co-trainers. Hence, the trainer should allocate time for the review process at the end of each day’s training activities. As facilitator solicit feedback from participants on the day’s activities, as this information will assist the trainers in ensuring the course is on track and in making adjustments for future. The feedback can be collected in writing using daily evaluation forms or through discussions. The trainers’ team should conduct daily debriefing at which they review participants’ feedback on the day’s activities in order to make adjustments as needed.

Consider the following during the debriefing session

- Get each trainer’s perspective on the activities covered during the day.
- Give opportunities for trainers to self-assess themselves and they should also receive feedbacks from the other trainers on how well they lead the sessions.
- Review participants’ feedback and try to address their concerns if they have any.
- Discuss each trainer’s role for the following day’s session.
- Prepare the classroom, rearranging seating (if necessary) for the coming day.
- Set up audiovisual equipment (such as: flipcharts, markers, overhead projectors, PowerPoint presentations, videos) and check that the models and other items needed for simulated practice are available.
<table>
<thead>
<tr>
<th>Materials needed</th>
<th>Activity check list</th>
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<tbody>
<tr>
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<td>✓ Registration</td>
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<tr>
<td>✓ LAP top</td>
<td>✓ Reg no &amp; code</td>
</tr>
<tr>
<td>✓ Flip chart</td>
<td>✓ Name, mobile, institution,</td>
</tr>
<tr>
<td>✓ Markers</td>
<td>✓ Profession, email</td>
</tr>
<tr>
<td>✓ Participants’ manual</td>
<td>✓ With profession (Ped, Int, Anesth, Nur,</td>
</tr>
<tr>
<td>✓ Facilitator’s Manual</td>
<td>Pha, etc.… )</td>
</tr>
<tr>
<td>✓ National Pain Management guideline</td>
<td>✓ Facility/University name</td>
</tr>
<tr>
<td>✓ Pain scoring wall chart</td>
<td>✓ Training packages</td>
</tr>
<tr>
<td>✓ Agenda on PC</td>
<td>✓ Facilitator’s guide</td>
</tr>
<tr>
<td>✓ Clip board</td>
<td>✓ Pain management participants’ manual</td>
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<tr>
<td></td>
<td>✓ National Pain Management guideline</td>
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<td>✓ Pain scoring wall chart</td>
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<td>✓ Agenda on PC</td>
</tr>
<tr>
<td></td>
<td>✓ Clip board</td>
</tr>
</tbody>
</table>

5. Opening
✓ Introductions, names and other things
✓ Identify content areas
✓ Describe course material
✓ Setting ground rules
✓ Selection presenters for
✓ Teach back and evaluators
✓ Pain HIV/AIDS

✓ Select group leaders
✓ Nominate time keepers, energizer,
✓ Recap for five days
✓ Confidence rating
✓ Conduct pre-test
✓ Carry out daily evaluation
✓ Carry out course evaluation
✓ Conduct post test
✓ Feed back
Registration form

<table>
<thead>
<tr>
<th>No</th>
<th>Trainee Name</th>
<th>Profession</th>
<th>Organization</th>
<th>Email Address</th>
<th>Mobile No</th>
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</tbody>
</table>
Unit 1: Introduction, magnitude of the problem of pain

Aim of Session: Appreciation of the impact of pain on quality of life and burden on health care system.

Unit Objective:
- By the end of the session, participants should be able to describe the magnitude of the problem of pain in the health care system in general

Enabling Objectives:
- Analyze the various sources of barriers to appropriate pain management
- Describe morphine use for pain management in Ethiopia
- Describe the appropriate model of care for chronic pain management

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnitude of the problem of pain</td>
<td>Presentation</td>
<td>45</td>
</tr>
<tr>
<td>Sources of barriers to appropriate pain management</td>
<td>Drill</td>
<td>15</td>
</tr>
<tr>
<td>Describe morphine use for pain management in Ethiopia</td>
<td>Slide photo</td>
<td>5</td>
</tr>
<tr>
<td>Model of care - palliative care</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td>Group discussion and feedback</td>
<td>Group discussion</td>
<td>15</td>
</tr>
<tr>
<td>Total time for the unit</td>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

Step by step instructions

- Going through power point slide for unit one part one, start by describing the objectives for the first part-magnitude of the problem of pain
- After going through at least 30 slides(after covering the issue on costs of pain) conduct the first drill(guessing drill) for about 10 minutes
- Proceed with 4 more slides to cover Euthanasia on the power point presentation and pause to carry out second exercise, drill on barriers to management of pain below
- Proceed with remaining slides, summarize and handle questions on the first part of unit 1

Drill: Give each trainee a chance by going turn by turn to respond to his share of questions

Barriers to appropriate pain management

Instruction:
1. Is this a barrier or not?
2. If so label each as patient-P; health system-S; or health care provider -CP- related.
   • Lack of awareness of standard pain assessment scales by most health care providers (S & CP related)
   • Lack of specific training on pain assessment and treatment. (S & CP related)
   • Lack of appropriate training of instructors as well as lack of awareness about the existence of the national pain management guideline and WHO step ladder protocol. (S & CP related)
   • Lack of local protocol for pain management. (S & CP related)
   • Many health professionals considered pain management to be important or of high priority for the health service institutions. (CP related)
   • Routine prescription of analgesics and, minimal use of opioids and antidepressants. (S & CP related)
   • Lack of using combination of drugs for pain. (S & CP related)
   • Lack of systematic approach to move to prescribing opioids until pain was too intolerable. (S & CP related)
   • Fear of drug complications and addiction. (P & CP)
   • Lack of proper communication between pharmacy technicians and clinicians. (S & CP)
   • Reluctant attitude or negligence by clinicians and nurses towards addressing pain. (CP)
   • Insufficient focus on underlying causes both in practice and training. (NOT Barrier)
   • Lack of incorporation of pain management training in the curricula of medical schools and presence of fragmented training. (S)
   • Lack of pre- and in-service training in pain management. (S)
   • Reluctance to demand treatment for pain. (P)
   • Insufficient knowledge about pain treatment as a human right. (P & CP)
   • Unavailability of essential analgesic drugs in the health care institutions. (S)
   • Pain relief is not the main wish but cure from disease. (P)
   • There is no national policy conducive to appropriate pain management. (S)
   • There is a national pain management guideline and necessary analgesia (NOT barrier)
Step by step instructions

✓ Go through part 2 slide presentations defining and describing palliative care
✓ Take a pause half way through to slide Number 34 and handle the following cases
✓ Go through the remaining slides before winding up with the unit summary and addressing questions from the participants

Case of “total pain” to illustrate Palliative Care
1. A.K is a 32 years old HIV positive man, who got his test recently. He has understood his high risk exposures to the virus and has accepted status and doing well after few days of anxiety. He has no complaints currently and no abnormal physical exam findings. His CD4 count is 510 A.K developed herpes zoster over the right chest after two years. The rash recovered soon but he continued to have severe burning pain over the right chest which revealed no thoracic pathology after thorough workup.

Answer-PC needs include the following care for asymptomatic cases
✓ PWP & Counseling -HIV, STI, nutritional,
✓ Condom
✓ Safe water (purifier, vessel)
✓ IOT prophylaxis(CTM,INH)
✓ Malaria prevention ( bed nets)

2. K.S. presented with chronic cough, was diagnosed to have TB, and treated with Category 1. Within few months he had same complaint and was again diagnosed with TB. He was then tested for HIV and turned positive. He was put on anti TB (retreatment). His CD4 count was 180 and was put on ART. He developed TB again associated with chronic diarrhea after 12 months. He was put on anti TB and ART was continued. After 1 other treatment after a year for TB and CD4 count of 7 and recurrent chronic diarrhea Treatment failure was considered.

What are PC needs?
Answer: Discuss on the following needs of above case
• Physical- pain management, Advanced HIV/AIDS care, Skin care, chronic diarrhea
• Psychological - Bad news communication about ART and anti TB failures, preparing family for bereavement
• Spiritual-holy water and other religious rituals suggested by family or patient may be appropriate to carry out
• Social-economic support as patient is terminal and not able to have income for daily needs

Summarize unit and address questions before closing for the next unit
Unit 2: Pathophysiology and classification

Aim of Session: Appreciation of the underlying mechanism for application in assessment, treatment selections and monitoring of treatment outcome.

Unit Objective:
- By the end of the session, participants should be able to describe pathophysiological mechanisms and classification of pain.

Enabling Objectives:
- Apply knowledge to analyze chronic pain as neurodegenerative disease
- Apply basic pathophysiology principles to classify and assess pain.
- Describe the mechanism of analgesia for drug selection and monitoring response to treatment
- Describe factors affecting pain perception and discrimination
- Explain the scientific basis for non-pharmacological pain management strategies

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophyslogic mechanisms</td>
<td>Presentation</td>
<td>60</td>
</tr>
<tr>
<td>Application to Classification and assessment of pain</td>
<td>Presentation</td>
<td>45</td>
</tr>
<tr>
<td>Factors affecting pain perception and discrimination</td>
<td>Drill</td>
<td>30</td>
</tr>
<tr>
<td>Exercise</td>
<td>Group work</td>
<td>30</td>
</tr>
<tr>
<td>Group discussion and feedback</td>
<td>Group discussion</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td>Total time take for the unit</td>
<td></td>
<td>135</td>
</tr>
</tbody>
</table>

Step by step instructions
- Going through power point slide for unit two part one start by describing the objectives then stop at about 10th slide to address questions from participants about pain pathways to evaluate their understanding.
- If no question go through slides to 17 and pause for the group discussion on experience of a ‘cubital fossa venipuncture’
- Pause again at slide 38 to deal with question and discussion on issue of ‘pain without nociception’
- Go through slides until number 50 then proceed with the exercises below
Thinking exercise 1: Is there pain without nociception? In other words does pain exist without damage or potentially damaging stimulus?

**Answer:** yes, Psychological, phantom pain, neuropathic pain in which the mechanism is central and peripheral sensitization.

**Thinking exercise:** Discuss the following cases

1-28 yrs old man with HIV and being treated for post herpetic neuralgia with Tramadol and Amyltriptylline. Patient stopped complaining of pain and discontinued medication three weeks after he began to complain of headache and vomiting and diagnosed with thalamic area tumor on MRI.

2-47 years old man with claudication and severe lower extremity pain secondary to peripheral vascular disease developed embolic stroke with infarction of small area of anterior cingulated cortex on the MRI. The patient continued to report pain on assessment but his demand for stronger analgesia decreased and indifferent.

**Additional Thinking exercise:** Athletes have been known to sustain serious fractures with only minor pain, and Beecher's classic World War II survey revealed that many soldiers in battle were unbothered by injuries that would have produced agonizing pain in civilian patients. Discuss

**Answer to Discussion:** Gate theory states that central input either psychological (purpose) or the reward pathway through endorphine or serotonin or stress hormones such as adrenalin and also activation of inhibitory pathways mediated by GABA modifies the severity of pain and temporarily during danger or activity period

**Drill:** Give each trainee a chance by going turn by turn to respond to his share of questions.

**Classify the following as**

1. Chronic vs. acute
2. Somatic, visceral and neuropathic pain
3. Breakthrough (incidental, end of dose, spontaneous)
   - A 25 years old man presented with excruciating pain of the right wrist following fall accident. (**acute, somatic**)
Managing Pain-facilitator’s guide

- An 80 year old lady had rashes along her chest, which has left a dark scar and severe, sharp, on and off, burning sensation. (chronic, neuropathic)
- A 37 years old lady has on and off, cramping, lower abdominal pain of 4 months duration and she has visited at least 3 physicians with this complaint. (chronic, visceral)
- 65 years old man has hepatoma with gnawing, constant and moderate pain in the right upper quadrant of the abdomen. (Chronic, visceral)
- Diabetic man has progressive numbness and tingling sensation on his leg and feet for the past 1 year upper quadrant of the abdomen. (chronic, neuropathic)
- A 30 years old laborer has sustained severe back pain following the lifting of a heavy object 3 days earlier. Pain is shooting type and radiates along his left hip to the feet. (Acute, neuropathic)
- An HIV positive man on ART has sharp, electric like pain radiating along his legs. (chronic or acute, neuropathic)
- A 45 years old heavy smoker for 10 years has cramping pain while waking which gets better at rest and lying down. (chronic or acute, somatic)
- A man with stroke burning along left side of his body. (chronic, neuropathic)
- A 40 years old women with cervical cancer has well controlled pain on Morphine 5 mg 4 hourly, but feels severe, squeezing pain during house chore or walking to the market place and the hospital for her follow up. (Chronic, visceral, incidental)
- A 15 years old girl has red swollen right knee joint with aching pain (Acute, somatic?)
- A 30 years old man complains of discomfort (sensation of vibration) in his right hip where he used to put his mobile phone. (chronic or acute neuropathic)
- A 38 years old man with cancer of the prostate has aching lower abdominal pain which has been well controlled with morphine 10mg every 4 hrs but still has pain 2-3 hrs after he took medication (chronic, visceral, end of dose)
- A 14 year old boy has high fever and stabbing pain in the right chest worse on breathing. (acute, visceral/pleural)
- 30 years old lady has throbbing, bi-temporal headache of one day duration. (acute, somatic/visceral)
- A 50 years old lady with breast cancer has well controlled pain, but occasionally has severe pain not related to any incident and sometimes even after she has taken her oral morphine administration. (chronic visceral, spontaneous/idiopathic)

Summarize unit and address questions before closing for the next unit
Unit 3: Assessment of pain

Aim of Session: To improve holistic pain assessment skills.

Unit Objective:
By the end of this session, participants should be able to do comprehensive pain assessment and arrive at classification and treatment decision.

Enabling Objectives:
- Describe a comprehensive pain assessment plan
- Conduct measurement and appropriately scoring of pain
- Analyze various characteristics of pain to arrive at classification and treatment decision
- Conduct relevant physical evaluation of pain and recommend essential lab and imaging investigation

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holistic pain assessment</td>
<td>Presentation</td>
<td>15</td>
</tr>
<tr>
<td>Pain measurement</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td>Pain characterization</td>
<td>Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Physical examination</td>
<td>Presentation</td>
<td>10</td>
</tr>
<tr>
<td>Exercise</td>
<td>Group discussion</td>
<td>15</td>
</tr>
<tr>
<td>Exercise</td>
<td>Role play</td>
<td>30</td>
</tr>
<tr>
<td>Exercise</td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td>Exercise</td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total Time</td>
<td>165</td>
</tr>
</tbody>
</table>
Exercise 3.1. Aim to discuss assessment of different types of pain.

✓ Introduce objectives of unit 3 with the first few slides of power point presentation then engage
   The group with the following discussion

✓ Ask everyone to think of a pain which they have experienced in the past (e.g. labor pain, a broken bone,
   a headache with malaria, toothache, abdominal cramp, muscle spasm etc) and to remember how it felt.
   There is no need to tell the rest of the group.

✓ Ask them to score their pain using the five finger score – everyone can hold up their hands at the same time.

✓ Ask what types of pain their patients have. As a type of pain is called out, the trainer can discuss that type
   of pain and its assessment with the group (see examples below).

✓ The participant could come up and fill the position of the pain on the body chart previously drawn on the
   flip chart.

✓ If participants do not produce many examples, provide them yourself or use those below.

✓ The trainer could pretend to have the conditions listed below and the participants can ask questions and
   either fill in a sample sheet of tool 1 or a large body chart on a flip chart or blackboard.
Step by step instruction

- Use cases in the box below if the above discussion fails to meet its objective of Voluntary participation of trainees
- There are four cases to be discussed with the whole group brain storming
- Use flip chart to key issues and points for everyone to see and follow

Cases 1-4 for group discussion on Assessment

<table>
<thead>
<tr>
<th>A painful swelling, e.g. a tumor</th>
<th>A painful wound, e.g. a burn</th>
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</thead>
<tbody>
<tr>
<td>- The pain is due to inflammation and pressure effects as well as tissue damage.</td>
<td>- The pain is due to tissue damage. How do patients usually describe the feeling? The history should include how the wound started, has the pain got worse, and the effects of movement, positioning, drugs etc.</td>
</tr>
<tr>
<td>- What is the usual story? How would you assess the pain using the body chart and pain score?</td>
<td>- How severe is the pain? This should be assessed using Tool 2.</td>
</tr>
<tr>
<td>Painful muscle spasm</td>
<td>The position and size of the wound can be marked on the body chart</td>
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<tr>
<td>- Can occur in a bed-bound patient, or cerebral palsy or stroke.</td>
<td>Peripheral neuropathy</td>
</tr>
<tr>
<td>- How could this be assessed, especially if the patient is not able to speak?</td>
<td>- The position and size of the wound can be marked on the body chart.</td>
</tr>
<tr>
<td>- Again the trainer could demonstrate this (e.g. observing position and posture, feeling muscle tone and watching for signs of pain).</td>
<td>- Can occur in HIV, or can be caused by ARVs or isoniazid.</td>
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<tr>
<td>- A participant can fill in the body chart.</td>
<td>- The pain is due to damaged nerves sending abnormal signals to the brain.</td>
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<tr>
<td>Exercise 3.2: Holistic histories presentation</td>
<td>- How do patients describe this?</td>
</tr>
<tr>
<td>Taking a good history is important when assessing any problem. It involves listening to the patient and also family members and other careers.</td>
<td>- How would this pain be assessed using the pain score and body chart?</td>
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</table>
Managing Pain-facilitator’s guide

GROUP WORK ON HOLISTIC HISTORY TAKING (25 minutes)

Aim: To teach a holistic approach to patient assessment.

Alemitu is a 35 years old unmarried lady who is widow supporting her 3 and 5 years old boys. She is working as a daily laborer. Six months however, she is unable to work due to pelvic and back pain secondary to advance cervical cancer. Pain is severe and off and on from night’s sleep.

Step by step instructions

- Work through this case together, the participants calling out ideas and the trainer writing them on the flip chart.
- Then divide group of three smaller groups and give each one a case form among those below in exercise 3.2
- They can write their ideas on flipchart papers to present to the class at the end. For each case, discuss:
  - How would you assess this patient?
  - What might be the cause of some of the problems?
  - What questions would you like to ask?
  - Try to group them into the four areas of holistic care

Write a short list of the problems you imagine are most important for this patient.

Expected response is:

- for each group to be able to address the physical, psychological or emotional, social and spiritual aspects in the patient
- Those chosen to be patients can modify and manipulate their own imagined histories

Feedback (15 minutes) – each group presents and others comment.

Role play Case 3. 2.1

You visit a 24-year-old woman with advanced cancer of the cervix. You have been treating her with morphine for lower abdominal pain. Now, she is lying silently in the house. She also has on and off vaginal bleeding and there is a very bad smell in the room, which is untidy, and the floor has not been swept. Her 12-year-old niece is with her.
Health provider role

General
- Self introduction and Greetings
- Identification: name, age, gender, marital, occupation religion, and ethnicity?
- Chief complaint and duration: what is your major reason for this visit?
- History of presenting illness/pain: tell me the course of your illness?
- Treatment history.

Measuring pain
- Looking at this chart tell me with which you pain matches or corresponds
- How severe is your pain? Is this the worst pain you ever felt? Is this the least pain?
- What is the worst pain that you remember? Compare with it.

Characterization
- Palliating and aggravating conditions?
- Quality of pain?
- Radiation, where is the pain located and where does it move?
- Severity-prevents sleep, walking, resting, eating, clothing, speaking, working?
- Timing-what time of day? How long? Association with activity?

Holistic history
- Psychological: How is she feeling? Is she depressed?
- Spiritual: Does she have a faith that is important to her? Is she receiving any spiritual support?
- Social history-family history, family tree, income role in society?
- Accompanying list of other problems and priority?
Suggested patient's response

- Responds to Greetings
- Hana, 45 yrs, married, house wife, Orthodox Christian, Gurage
- Chief complaint and duration: lower abdominal pain of 4 months
- History of presenting illness/pain: progressively worsening pain associated with foul smelling discharge and bleeding
- Treatment history: Paracetamol, diclofenac, various antibiotics
- This is the worst pain I ever had except labor pain?
- I remember that labor pain was severe but short duration, this one is always with me
- Looking at this chart and say you do not understand it
- After explanation by health provider tell it is 8/10 on face scale
- Palliating when she takes medication, laying in bed and using hot plastic water bag on her lower abdomen and groin area
- Aggravating conditions is walking and working in the house
- Quality of pain is aching and constant
- It starts over lower abdomen and pelvis and radiate to the back and buttock area
- Severity: can’t walking/working in the day, sometimes prevents sleeping at night
- Timing: worse in the day but sometimes wakes her up at night also
- Psychological: She is worried and anxious. Sometimes extreme fear of dying
- Spiritual: she attends prayer daily, takes holy water and her yeniseha abat visits her regularly
- Social history: her daughter is working in Gulf and her husband is dead
- Foul smelling discharge and bleeding is also worrying her
Please read the following case study and answer the questions

**Exercise 3.2.2:** Pain assessment-CASE study

Almaz is 55 years old and previously had surgery for breast cancer. She now has severe pain in her hips and cannot move her legs. If she puts something cold on her hips, they feel better. The pain is not shooting or burning. By looking at the FACES, she says that her pain is level 3. She has no other symptoms. This is her first visit to the clinic.

**Classify her pain?**

**Exercise 3.2.3:** Pain assessment-CASE Study

Sara is 41 year old and has HIV/AIDS. She has shooting pain in the left side of her face and horrible aching pain in her shoulder and back. She holds the shoulder with the opposite hand. This is the initial visit for this problem and she has not taken any medicine. She has no signs of infection on her face. She says that her pain is grade 4.

**What tool would you use to assess this case?**

**Exercise 3.2.4:** Pain assessment-CASE study

You go to visit Getachew at home. He is in bed and cannot get up. He feels very bad and has terrible pain in his belly that comes and goes. He also says that he has a problem in his legs, a feeling like pins and needles. His wife gave him some herbs which did not work. He has no signs of infection. When asked to grade his pain (using fingers) he says the belly pain is a 3 and the leg pain a 4.

**Assess to identify classification and underlying cause?**

**Drill:** Give each trainee a chance by going turn by turn to respond to his share of questions.

**Exercise 3.3:** Drill in Pain assessment-True & False Statements

A list of statements on pain assessment follows. Tick ✓ either the T (true) or F (false) column on the right for each statement.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>If a patient has pain, he/she will tell you even if you do not ask.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Muscle ache is an example of neuropathic pain</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Spasm is a nociceptive pain</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Shooting pain is an example of nociceptive</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Loss of sensation of heat and cold is an example of SPECIAL PAIN</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Phantom pain is an example of SPECIAL PAIN</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Colic is a hollow visceral nociceptive pain</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>You should always ask the patient where their pain is located</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>A patient can have both PAIN and SPECIAL PAIN at the same time</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The pain can be in more than one site (arm, leg, back, face, etc.)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>You have to grade the pain in every patient and at every visit</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Social or spiritual concerns do not have anything to do with pain</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>You need to look for possible causes of pain, such as signs of infection.</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**Summarize unit and address questions before closing for the next unit**
Unit 4: Pharmacological Methods of Pain Management

Aim of Session: Describe and demonstrate the principles of pain management.

Unit Objective:
By the end of the session, participants should be able to apply the principles of pharmacologic method of pain management.

Enabling Objectives:
- Set realistic goal and objectives for treatment of pain
- Describe barriers to effective pain treatment
- Apply the principles of pain management
- To administrate medications orally, regularly by the clock,
- To select drugs in a stepwise approach, using a mix of adjuvants and analgesics
- To describe variations from the general principles of management and
- Describe the mechanisms of analgesic drugs side effects
- Introduce individualized management case by case
- Educate and empower patient and families on the treatment of pain

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set realistic goal and objectives for treatment of pain &amp; describe barriers to effective pain treatment</td>
<td>Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Apply the principles of pain management</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td>To describe variations from the general principle of management</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td>Describe the mechanisms of analgesic drugs side effects</td>
<td>Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Educate and empower patient and families on the treatment of pain</td>
<td>Exercise and group work</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>195</td>
</tr>
</tbody>
</table>
WHO Analgesic Ladder

The analgesic ladder for pain control

**STEP 1**
- NON-OPIOID (PARACETAMOL OR NSAID, EG ASPIRIN, IBUPROFEN)

**STEP 2**
- MILD OPIOID FOR MODERATE PAIN (CODEINE*)
- +/- NON-OPIOID

**STEP 3**
- STRONG OPIOID FOR MODERATE TO SEVERE PAIN (MORPHINE*)
- +/- NON-OPIOID

*REMEMBER TO PRESCRIBE A LAXATIVE UNLESS PATIENT HAS DIARRHOEA

+/- ADJUVANT DRUGS
- STEROIDS • ANTIDEPRESSANTS • ANTIREFLAUX • MUSCLE RELAXANTS • ANTISPASMODICS

Give analgesics: • by the mouth • by the clock • by the ladder

Source: World Health Organization
Instructions: After going through introductory presentation of pain management and the five principles of pain management. Take a pause for questions and exercise (about 30 power point slides of unit 4)

Exercise 4.1: Case Study-WHO analgesic ladder

Part 1:
Acute severe pain started on step one
Zenash is 45 years old and comes to the clinic for dull persistent pain on her sternum and low back. You assess her pain and decide that she has moderate chronic bone pain (Grade 2/10). You need to decide how the pain can be treated and then explain this to her. Please answer the following questions.

a. From which step of analgesic ladder would you start?
   
   Step 1

b. Which drug would you give Zenash?
   NSAIDS or Paracetamol

c. How frequently during the day will Zenash need to take the medicine?
   Least frequent is 12 hours; most frequent is 6 hours depending on the drug type

d. Will Zenash need to come back to see you? If so, when?
   She should return after a week if nearby otherwise told how to escalate every week and return after full dose is reached without improvement

e. What should Zenash do for breakthrough pain?
   She should take another NSAIDS not more than 2–3 times /day

f. If Zenash takes an extra dose, will her regular dosing schedule change?
   NOT if she is taking a different drug

Instruction: Exercise 4.2

✓ Each participant WOULD NOW open unit 4 in the exercises of module 4
✓ For each drug in the following list, put an X in either the OPIOID or NON-OPIOID column
✓ Also to answer the subsequent questions on their workbook(module 4)

1-Which of the following are opioids and non opioids?

<table>
<thead>
<tr>
<th>Drug</th>
<th>Opioids</th>
<th>Non-opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paracetamol</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Aspirin</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Oral morphine</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

2-Which non-opioids could you choose if the patient has?
   - Gastric problems: PARACETAMOL or OPIOIDS
- Fever in addition to pain: **NSAIDS**
- Inflammation in addition to pain: **NSAIDS**
- Pain and black stool after taking aspirin: **PARACETAMOL**

3-Which **non-opioids** have the following side effects?
- Epigastric pain- **NSAIDS**
- Black stool – **ASA and other NSAIDS**

Instructions: Exercise 4.3
- After going through the remaining power point presentations pause again and do the drill below
- Start from one end of the room and make sure to give each participant a share of the questions
- A list of statements on pain assessment follows.
- Write T (true) or F (false) column on the right for each statement.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It is possible to make pain go away completely</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>You should never leave the patient in pain</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Once you have assessed pain and chosen medication, there is nothing else to do.</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>For chronic pain, oral, rectal and intramuscular routes are all good options for pain killers</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Morphine can only be given by injection</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>Pain should always be controlled completely</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>Patients should take pain killers only when they have pain</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>8</td>
<td>A patient with chronic pain should not wait for pain to come back before taking next dose</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Every patient needs a personalized schedule for pain killers</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The first dose should be taken when the patient wakes up</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>It is not worth taking pain killers before going to sleep at night</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>The WHO analgesic ladder has 6 steps</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Step 1 includes paracetamol and aspirin and ibuprofen</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Step 2 includes antibiotics to treat infection (which can be a cause of pain)</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Step 3 includes codeine</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Step 4 includes morphine</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Analgesic drugs need to be adjusted frequently in the same patient</td>
<td>T</td>
<td></td>
</tr>
</tbody>
</table>
Instruction: Exercise 4.4-(1, 2, 3) Case management options
✓ Divide trainees into groups of three and let them work on the following cases from workbook/module 4
✓ Let them present their conclusions at the end orally by their represented
✓ Remember to describe the following to trainees
  - The first treatment does not make the pain go away.
  - You re-assess the patient and adjust the medication two more times.
  - To read the following examples of ways to treat this patient during the three visits, and answer the questions below.

Instruction: Exercise 4.5-prescription practice
✓ At the end of the three options above continue the prescription exercise in group of threes and using the workbook/module 4

1-You are in the clinic treating a 45 year-old patient with chronic pain of moderate intensity (3/10 on the pain scale) at his first visit.
Option I:
1. Start with paracetamol plus codeine.
2. Pain is not controlled. Use paracetamol alternating with aspirin, plus codeine.
3. Pain is not controlled. Add oral morphine to paracetamol and codeine.

- Is step 1 correct? Explain why or why not.
  No, 3/10 is mild pain and treatment should begin with paracetamol alone
- Is step 2 correct? Explain why or why not.
  Yes and NO. It is possible to use step 1 with 2 but alternating between paracetamol and ASA two drugs sharing similar analgesia mechanism has no strong evidence and not universally recommended. But anecdotal cases from India support measures of combining paracetamol with NSAIDS with good results
- Describe any errors you find in activity 3-step 2 & 3 class drugs shouldn’t be prescribed together

Option II
1. Start with paracetamol 1 tablet every 6 hours
2. Pain is not controlled, give ibuprofen 400mg every 6 hours
3. Pain is not controlled, refer to hospital

- Is step 1 correct or not? Please explain why or why not?
  Yes, guideline suggests 500mg/1 tab every 6 hours to be the minimum effective dose
- Is step 2 correct or not? Please explain why or why not?
  No, Ibuprofen is step one drug and would not be more effective, do not switch for a similar class drug
- Is the dosage in step 2 correct? If not, please give the correct dose and timing?
  No Ibuprofen 400mg 8hourly or 12 hourly
• Is step 3 correct? Why or why not?
  *step 2 or 3 drugs may not be available in primary care settings in which case referral is necessary, but the pain score is still mild so better investigate compliance to medicine as well as increase dose to maximum levels before referral

• When would you refer a patient to the hospital?
  *If pain score worsens or remain the same with step one medications and step 2 medications are not available due to restrictive regulations then referral for step 2 drugs is a possibility

Option III
1. Start with paracetamol: 2 tablets every 4 hours
2. If pain is not controlled, continue paracetamol at the above dose and add codeine 30mg every 4 hours
3. If pain is still not controlled, continue the paracetamol at the same dose and increase the codeine to 60mg every 4 hours
4. If pain is still not controlled, continue both paracetamol and codeine and add morphine 2.5mg every 4 hours

• Is step 1 correct?
  *No due to passing the maximum recommended dose of 100mg 6hourly
• Is the dosage in step 2 correct? If not, please give the correct dose and timing.
  *Yes, the dosage of Codeine is correct
• Is step 3 correct? Why or why not? When would you refer a patient to the hospital?
  *No, though the dose of codeine is ok, Paracetamol dose is still incorrect as mentioned above
• Is there any error in step 4?
  *It is incorrect to combine two opioids even if one is weak and the other is strong

Exercise 4.5: Case management - Medications to control pain

Alemu is a 46 year-old man coming to the clinic for the first time with moderate to severe back pain. You need to decide which medication to use.

1. Which drug do you think Alemu should take to control his pain?
  *One can start with step on drugs and maximum dose or even
  *Step two drugs or low dose step 3 drugs could also be administered

2. How frequently should he take it?
  *Step one drugs are taken 6 hourly in case of paracetamol or ASA
  *8 hourly in case of Ibuprofen or Diclofenac while step two or three drugs are usually taken 4 hourly

3. What else should Alemu take if he has pain before going to sleep?
  *Bedtime step one different from standing dose or morphine use same as Regular dose

4. What is the maximum number of paracetamol tablets Alemu could take per day?
-1000 mg, every 6 hours
5. What should Alemu do if his pain does not go away?
   - There are other options. Step two drugs or low dose step 3 drugs could also be administered

Write a prescription for Alemu

**Prescription for Alemu**

1-Paracetamol 2 tablets (500mg tabs) po every 6 hours
2-ASA 2 tabs (300mg tabs) po at bed time

Exercise 4.6: Medications to control pain

Alemu comes back after two days and the pain has not gone away. He is taking two tablets of paracetamol every 6 hours and has taken two tablets of aspirin before going to sleep without relief. Codeine is not available in your health facility. What do you think Alemu should be given now?

**A new prescription for Alemu**

Paracetamol 1000mg every 6 hours
Add tramadol 50mg every 6 hours, 50 mg at bed time

Write a new prescription for Alemu

Part 2:
Alemu returns, still in a lot of pain. Again, you do not have codeine. What will Alemu need to do if pain persists or does not go away? Escalate the dose of Tramadol to 100mg every 6 hourly Would you continue paracetamol in addition to new drug? Yes

**Write a new prescription for Alemu**

A new prescription for Alemu

Paracetamol 1000mg every 6 hours
Add Tramadol 100mg every 6 hours.
Instruction: **Exercise 4.7: Role Play**

- You will now lead a role play.
- For each role play, you will need to split trainees into groups of three.
- Each of the trainees will have a role: health worker (HW), patient/caregiver (P or C) or And observer (Obs)
- Assign trainee for each role to be played
- Each person will be given a card with a scenario to read in advance.
- The health worker should read the card, and then try to conduct the visit without looking at the card.
- The patient should follow the instructions on the card when answering the health worker's questions.
- The observer should complete the checklist of items to be addressed during the exercise, and review this with the small group at the end of the exercise.
- Those assigned to be the health worker, have paper ready to write down your prescriptions.
- Hanna, the patient is coming to the clinic because of severe bone pain. She has had breast cancer

<table>
<thead>
<tr>
<th>Role</th>
<th>Instruction</th>
</tr>
</thead>
</table>
| HW   | Hanna is coming to the clinic because of severe bone pain. She has had breast cancer. Ask:  
- Where is the pain?  
- Do you have pain anywhere else?  
- Is this pain an ache or is it shooting or burning  
- Do your muscles hurt or just your bones?  
- Are you taking any medicine for your pain?  
- How bad is the pain? Please indicate which of these faces describes your pain better (Grade 3).  
You decide to give Hanna oral tablets  
Explain to Hanna that:  
- The tablets will need to be taken regularly, every 4 hours  
- If she does not have a watch, she can look at the sun/moon, listen to the radio or ask a neighbor  
- She will start with a certain dose, but if the pain does not go away, she will need to come back for you to adjust the dose or add a second drug. |
She should take the first dose when she wakes up and the last one before going to sleep. She will need to take the second dose before pain comes back. If pain comes back before the time she is supposed to take her the medicine, she should take an extra “rescue” dose (half of full dose of the 4-hourly dose) but remember to continue on the regular schedule afterwards.

Write down the name of the drug and the time it should be taken:
- Paracetamol at a dosage of 1000 mg every 4 hours. (One tablet contains 500 mg).
- Explain that if pain comes back before it is time to go to sleep, no additional tablets of paracetamol should be taken, but instead, 2 (300mg) tablets of aspirin.
- Explain that if her pain persists, she should try alternating aspirin and paracetamol, taking 2 tablets of paracetamol when she first wakes up and then two hours later, 2 tablets of aspirin (300 mg tablets).
- Tell Hanna to come back if the pain continues and answer her questions.

If asked by the Health worker, you should say you have GRADE 3 bone pain (with no pins and needles). You do not know how to read and you are afraid that your pain will not go away. Ask what a rescue dose is and what to do if pain comes at night. Also, if the health worker asks, you do not have a watch.

Observer:
Ask: Where is the pain?
Ask: Do you have pain anywhere else?
Ask: Is this pain a ache or is it shooting or burning
Ask: Do your muscles hurt or just your bone?
Ask: Are you taking any medicine for your pain?
Ask: **How bad** is the pain? Please indicate which of these faces describes your pain better (Grade 3)

Decide to give Hanna oral tablets:
- Explain that the tablets will need to be taken regularly, every 4 hours.
- Explain that if she does not have a watch, Hanna can look at the sun/moon, listen to the radio, or ask a neighbor.
- Explain that she will start with a certain dose but if the pain does not go away, she will need to come back for the health worker to adjust the dose or add a second drug.
- Explain to Hanna, that should take the first dose when she wakes up and the last one before going to sleep.
- Explain that she will need to take the second dose before pain comes back. If pain comes back before the time she is supposed to take the medicine, she should take an extra “rescue” dose (half of the 4-hourly dose) but remember to continue on the regular schedule afterwards.
- Write down the name of the drug and the times it should be taken: paracetamol at a dosage of 2 tablets every 4 hours.
- Explain that if pain comes back before it is time to go to sleep, no additional tablets of paracetamol should be taken, but only 2 tablets of aspirin.
- Explain that if pain persists she should try alternating aspirin and paracetamol, taking 2 tablets of paracetamol when she first wakes up and then two hours later, 2 tablets of aspirin (300 mg tablet).
- Tell her to come back if the pain continues
- Answer Hanna's questions
Instruction: Pain management Exercise 4.8

✓ Start this drill from one end of the rows, giving a chance to every trainee to participate
✓ The trainer can also go around the room and ask questions of the participants.
✓ Immediate feedback will be provided and different answers discussed.

1. What is the best way to administer analgesia for chronic pain?
2. Should analgesics be given on a time schedule or PRN?
3. What would you tell a patient to do for breakthrough pain?
4. What are the three steps of the analgesic ladder?
5. Is it important to re-assess pain periodically? Why?
6. Which drugs are included in step 1 of analgesic ladder?
7. What is the dose of paracetamol?
8. What is the dose of aspirin?
9. What is the dose of ibuprofen?
10. What are the side effects of aspirin?
11. Which drugs are included in step 2 of analgesic ladder?
12. What is the dose of codeine?
13. If codeine is not available, which alternative drugs can be used?
14. Which drugs are included in step 3 of analgesic ladder?
15. What is the maximum number of paracetamol tablets you can give in 24 hours?
16. What are adjuvant drugs? Why are they called so?

Instruction: Exercise 4.9 -Neuropathic pain -case studies

✓ Give this as an individual exercise for 10 minutes
✓ Then conduct a group discussion and debate for about another 15 minutes

CASE: Ayelech has chronic neck pain and has been examined in the hospital with an X-ray and has been taught how to do exercises. She comes to the clinic because she has had an electrical burning pain that goes down her left arm for the last five days. It feels like a humming electrical feeling, very different from normal pain. Beside a headache lasting for two or three hours to an entire day, but then going away, she does not have any other problems. She does not want to go to the hospital but wants help with the pain.

• How would you manage this case?

  History, evaluation focusing on grading the pain and characterizing it would be the first step

• Which drug should you use for pain which feels electrical or has other abnormal sensations?
Adjuvants such as tricyclic or anticonvulsants are preferred but additional step 1 or 2 or three may be combined depending on the pain scale scoring

- What is the starting dose?
  Minimum dose of tricyclic such as 12.5 mg may suffice to start
- Two weeks later Mary comes back and the sensation of pins and needles is still present. Is it possible to increase the dose if pain persists?
- Yes, The dose of tricyclics may be doubled after 2 weeks but anything beyond that may have more side effect than analgesic effect
- How long should you wait before increasing the dose?
  It is not advisable to increase the dose of tricyclic unless one tries the same dose for up to 2-3 weeks to get effect, but step 1 or 2 or three may be combined depending on the pain scale scoring to help with the pain

Summarize unit and address questions of participants before proceeding to the next unit
Unit 5: Morphine and other opioids

Aim of Session: To improve knowledge and confidence in the use of morphine. This teaching module should be used in situations where morphine is available or will be available very soon. If there is no access to morphine, it can be left out.

Unit Objective:
By the end of the session, participants should be able to analyze the pharmacokinetics and pharmacodynamics of morphine.

Enabling Objectives:
- Analyze the pharmacokinetic (metabolism and disposal) of morphine
- Analyze pharmacodynamics (therapeutic actions and side effects, toxicity) of morphine
- Classify, rotate with appropriate equianalgesia among the opioid family of drugs
- Prescribe, escalate and taper properly morphine regimens
- Explain the place of morphine in the World Health Organization pain ladder

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td>Morphine Prescribing</td>
<td>demonstration</td>
<td>15</td>
</tr>
<tr>
<td>Morphine calculations</td>
<td>Exercise(Working in pairs or threes)</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Other exercise</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Presentation</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Calling out</td>
<td>5</td>
</tr>
<tr>
<td>Summing up</td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td>Total time</td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>

Instruction: Exercise 5.1

*Go through all power pint slides before starting on the exercises below*

Drill-morphine in pain management

- The trainer will go around the room and ask questions of the participants.
- Start from one end of the room and give a chance to each participant
- Immediate feedback will be provided
- Different answers will be noted on the flip chart and discussed.
Managing Pain-facilitator’s guide

1. Is morphine safe to use for controlling severe pain? YES
2. Why is morphine the opioid of choice? Cheaper & safer
3. Is intolerance very frequent? Intolerance to some side effects
   Such as constipation is common
4. Would you start morphine right away for all patients with pain? No but for severe pain
5. What other drugs would you try before giving morphine? Step 1 & 2 classes
6. In which cases would you start with oral morphine? Moderate to severe pain Failed
   to be controlled with step 1 & 2
7. Can you go from step 1 drugs to oral morphine in the same day? Not usually as time is required to see the effects of step 1
8. In which form does morphine usually come? Oral tablet or syrup
9. What is slow release morphine and its advantages & disadvantages? Slow release morphine is useful once the pain is controlled with the titration of immediate release morphine
10. What is the best way to administer morphine? Oral
11. What can be a good alternative route? Parenteral, rectal dermal but availability is a problem
12. What is the starting dose of morphine? Usually 5mg but in especial situations 2.5mg
13. Is there an upper limit for the dose? No ceiling dose for morphine as long as it is titrated to the pain scoring
14. What should you do if pain persists after the initial dose? After checking compliance increase Dose by 30-50%
15. How would instruct a patient to take morphine? To take prescribed dose every 4 hrs
   And to take laxatives along
16. Is morphine dosing the same for all patients? No, children, elderly, morphine naïve
17. What would you do for breakthrough pain? Give the morphine dose equal to the regular dose

Instruction: Exercise 5.2- Drill
Aim: to assess participants’ understanding of the side effects of morphine.
- Prepare sheets of paper, two for each participant.
- One has a smiley face and says TRUE.
- The other has a sad face and says FALSE.
- Read out the questions below one by one.
- For each question the participants must hold up their papers,
  or if you prefer, ask participants to stand up if they agree with the statements and remain seated if they disagree.

Questions: TRUE & False
1. Nausea caused by morphine continues as long as you keep taking it. (F)
2. If the patient is itching you must stop the morphine. (F)
3. Constipation always occurs when taking morphine. (T)
4. Patients on morphine will always be drowsy and cannot do any useful work. (F)
5. If a patient on morphine has diarrhea, you should continue to prescribe a laxative. (F)
6. Morphine must not be prescribed with anti-emetics. (F)
7. Patients starting morphine must be warned about addiction. (F)
8. Constipation caused by morphine improves after 3-4 days. (F)
9. If a patient on morphine is very drowsy after a few days of starting it is best to decrease the dose. (T)
Instruction: Exercise 5.3: Morphine prescription
✓ What you will need to do when recommending oral morphine?
✓ Every time that you will recommend oral morphine, you will need to fill in a prescription for CLASS A drug that the medical doctor will then need to sign.
✓ Here you will help participants to practice how to do this in this exercise.
✓ It is better to use simulation here and maybe make a photocopy of narcotic drug prescription paper and have trainees practice and fill

EXEMPLARY PRESCRIPTION OF CLASS A DRUGS

Pt. Name
Name of Health facility/Health center
Pt. No. 321

Morphine solution 5mg in 5ml 2.5mls by mouth every 4 hours during the day and then 5mls at night for pain
Dispense total weekly dose of: 105mls of 5mg in 5ml
(One hundred and five milliliters of five milligrams in five milliliters)

EDIT and use Psyclh-narcotic prescription paper as sample
15.07.2003

Doctor prescribing class A drug: ______________________

Prescription exercise 1
W/ro. Almaz H is a patient with severe recurrent back pain that is not controlled by codeine. You would like to prescribe liquid morphine. You want her to take the morphine every four hours during the day, starting with a 2.5 mg dose (which equals 2.5ml of a 5mg/5ml solution).

Prescription exercise 2
How would your prescription for Ato Beyene be different if you wanted to add a 5ml? Night-time dose in case of increased pain?
**Prescription exercise 3**
Your health center uses only the 5 milligrams in 5 milliliters solution of morphine. You see a patient named Ayele M (patient number 768) who has end stage AIDS and increasing bone pain that is no longer controlled with his current dose of oral morphine (2.5ml every four hours). You would like to write him a prescription doubling his current dose and giving him an extra nighttime dose. Please fill in the prescription below.

**Prescription- exercise 4**
W/ro Nigatwa is a 46 year-old woman with severe aching pain in her shoulder and back. She was diagnosed with metastatic stage breast cancer in the hospital and discharged a few weeks ago. You saw her in the clinic two days ago and prescribed ibuprofen and codeine. Today she says she is still having pain that prevents her from moving during the day and keeps her awake at night. Please describe what you would do for her. If you need to write a Class A prescription (narcotic prescription form), use the form below.
Answers

Prescription exercise 1 ANSWER
Patient with severe recurrent back pain that is not controlled by codeine. You would like to prescribe liquid morphine. You want her to take the morphine every 4 hours during the day, starting with a 2.5 mg dose (which equals 2.5ml of 5 milligrams per 5 milliliters solution).

Please fill in the blanks with the missing information

<table>
<thead>
<tr>
<th>Pt. name:</th>
<th>Name</th>
<th>Health centre</th>
<th>Pt No. 321</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.9.2013</td>
<td>Morphine solution 5 milligrams in 5 milliliters</td>
<td>Take 2.5 mls by mouth every 4 hrs during the day</td>
<td>Dispense total weekly dose of: 70 mls of 5mg in 5ml (seventy milliliters of five milligrams in five milliliters)</td>
</tr>
</tbody>
</table>

Doctor prescribing class A drug:
SIGNATURE
**Prescription exercise 2 ANSWER**

How would your prescription be different if you wanted to add a 5ml night-time dose in case of increased pain? Please fill in the blanks below

<table>
<thead>
<tr>
<th>Pt. name:</th>
<th>Health Center</th>
<th>Pt No. 321</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26.09. 2013  
Morphine solution 5 mg in 5 ml  
Take 2.5 mls by mouth every 4 hours during the day plus 5 mls at night when needed for pain  
Dispense total weekly dose of: **105 mls of 5 mg in 5 mls** (one hundred five milliliters of five milligrams in 5 milliliters)  
Doctor prescribing **class A drug:** SIGNATURE
Prescription exercise 3 ANSWER
Your health center uses only the 5 milligrams in 5 milliliters solution of morphine. You see a patient (patient number 768) who has end stage AIDS and increasing bone pain that is no longer controlled with his current dose of morphine (2.5mg, every four hours). You would like to write him a prescription doubling his current dose and giving him an extra night-time dose. Please fill in the prescription below.

<table>
<thead>
<tr>
<th>Pt. name:</th>
<th>Health center</th>
<th>Pt No. 768</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.10.2013</td>
<td>Morphine solution 5mg in 5ml</td>
<td></td>
</tr>
<tr>
<td>5mls by mouth every 4 hours during the day and then 5ml at night as needed for continued pain</td>
<td>Dispense total weekly dose of: 175 mls of 5mg in 5mls</td>
<td></td>
</tr>
<tr>
<td>(one hundred seventy five milliliters of five milligrams in five milliliters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor prescribing class A drug:</td>
<td>SIGNATURE</td>
<td></td>
</tr>
</tbody>
</table>
Prescription exercise 4 ANSWER

You are working at the Health Centre described in the previous exercise.

Amarech B (pt. number 913) is a 46 year-old woman with severe aching pain in her shoulder and back. She was diagnosed with metastatic stage breast cancer in the hospital and discharged a few weeks ago. You saw her in the clinic two days ago and prescribed ibuprofen and codeine. Today she says she is still having pain that prevents her from moving during the day and keeps her awake at night. Please describe what you would do for her. If you need to write a Class A prescription, use the form below.

1. Continue ibuprofen and add oral morphine as prescribed below. Discontinue codeine.
2. Explain and demonstrate how to give oral morphine.
3. Explain how to deal with breakthrough and early morning pain.
4. Offer suggestions for non-medical ways to relieve pain, such as massage, relaxation techniques, or listening to music.
5. Make sure she knows to come back or if possible call you if the pain does not improve.

<table>
<thead>
<tr>
<th>Pt. name:</th>
<th>Health centre</th>
<th>Pt No. 913</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.09. 2003</td>
<td>Morphine solution 5mg in 5mls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Take 2.5 mls by mouth every 4 hours plus 5mls at night if necessary for pain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dispense total weekly dose of: 105 mls of 5mg in 5mls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(one hundred five milliliters of five milligrams in 5 milliliters)</td>
<td></td>
</tr>
<tr>
<td>Doctor prescribing class A drug:</td>
<td></td>
<td>SIGNATURE</td>
</tr>
</tbody>
</table>

Instruction:

Exercise 5.4- Demonstration skill station for dispensing morphine

- Morphine comes in a liquid preparation that must be measured in milliliters, but you prescribe in milligrams.
- In this exercise you will help participants how to go from mg to ml dosing, using the two different dilutions available: Ethiopia 5mg/5ml, 20mg/5ml.
- It is very important that participants learn this well.
- Have a 2.5ml, 5ml, and 10ml syringe and a medicine bottle full of colored water.
- If the solution is 5mg/5ml, get a volunteer participant to come up and draw up a 2.5mg dose.
- Try this with a few more doses and volunteers.
- Change to 50mg /5ml solution and ask a volunteer to draw up a dose of 60mg.
- Participants will later need to educate patients and caregivers about proper dosing, show them how to give oral morphine in a needleless syringe, and have them practice until they do it correctly.
Part 1:
You have prescribed Alemu 2.5mg of oral morphine every 4 hours. The oral morphine comes in a liquid solution that can be measured in ml. With the 5mg/5ml solution, 2.5mg correspond to 2.5 ml. This means that you will teach the patient to draw 2.5 ml of liquid for each dose (every 4 hours). If you increase the dose to 5mg, the patient will need to draw 5ml each time.

The facilitator will now demonstrate *.
How many ml of liquid morphine (5mg/5ml solution) will you give Alemu if you prescribe 2.5mg?

How many if you prescribe 5mg?

How many if you prescribe 12.5 mg?
Part 2:
You have increased Alemu’s dose to 25mg every four hours. When higher doses of morphine are used, it may be more convenient for the patient to use the stronger solution of 50mg/5ml in Ethiopia 20mg/5ml.

How many ml of the 5mg/5ml solution would you draw to have 25mg?

This is a lot for the patient to draw. The facilitator will now demonstrate the conversion to the stronger solution *.

How many ml of the 50mg/5ml solution would he draw to have 25mg?

How many ml of the 50mg/5ml solution would he draw if he is taking 75 mg?

How many ml of the 50mg/5ml solution would he draw if he is taking 100 mg?

*Demonstration by the facilitator, with calculation on the flip board

MORPHINE CALCULATION EXERCISE (15 minutes)

Instruction: Exercise 5.4- Group work
Aim: To improve competence in adjusting morphine.

✓ Divide into pairs or threes and give out the papers of morphine calculations.
✓ Do at least the first two or three together with the whole group so they can see what is expected of them, then let them work through as many as they can.
✓ FEEDBACK (15 minutes)
✓ Work around the room getting answers from each pair to a different question.
✓ Sort out problems as you go.
Morphine calculations

1. A patient is taking 10mg of morphine every four hours and his pain is not well controlled (has 4 breakthrough pain and pain is still 7/10).
   a. What would you increase the dose to?
      ANSWER ____________________________

2. A patient has just started on 2.5mg of morphine every four hours. His pain is improved a little, but could still be improved more.
   a. What would you increase his daily dose to?
      ANSWER ____________________________
   b. What would you give him last thing at night?
      ANSWER ____________________________

3. A patient has been taking 30mg of morphine every four hours and still has pain about an hour after each dose.
   a. What would you increase the dose to?
      ANSWER ____________________________
4. A patient at home who is taking 10mg of morphine every four hours says he still has occasional quite severe pain but not every day.
   a. What would you advise him to do?
      ANSWER ____________________________
   b. What would the breakthrough dose be?
      ANSWER ____________________________

5. A patient is taking 60mg of morphine every four hours. He gets pain when he needs to move, but otherwise he is free from pain. His morphine solution is 5mg/5ml strength.
   a. How would you investigate his breakthrough pain?
   b. Would you use a breakthrough dose?
      ANSWER ____________________________
      If so, when? ANSWER ____________________________
   c. He is taking a large volume of liquid (60ml) every four hours. How could this be made easier?
      ANSWER ____________________________

6. A patient is taking 20mg of morphine every four hours and took one breakthrough dose in the middle of the night. He says the pain is still at level six most of the time.
   a. Would you increase the dose?
      ANSWER ____________________________
   b. What is the new dose?
      ANSWER ____________________________
   c. What is the new breakthrough dose?
      ANSWER ____________________________
7. A patient taking 10mg of morphine every four hours becomes unable to swallow due to his advanced esophageal cancer.
   a. What could you do for him?
      Answer ________________

8. A patient with bone metastases comes home after radiotherapy. He is on 30mg of morphine every four hours and starts to get confused and hallucinate.
   a. What could be the problem?
      ANSWER ________________
   b. How would you deal with it?
      ANSWER ________________

9. A patient aged six is on morphine 2.5mg every four hours and is still in pain.
   a. Can you increase the dose and if so what to?
      ANSWER ________________

10. A patient on a regular dose of 20mg of morphine every four hours vomits after his night-time dose.
    a. What should you do?
       ANSWER ________________

11. A patient on 15mg of morphine every four hours has had six breakthrough doses in 24-hours.
    a. What is the total daily dose?
       ANSWER ________________
    b. How would you change the regular dose?
       ANSWER ________________
    c. What is the new breakthrough dose?
       ANSWER ________________
12. A patient on 15mg of morphine every four hours has had six breakthrough doses in 24-hours.
   a. What is the total daily dose?
   \text{Answer} \\
   b. How would you change the regular dose?
   \text{Answer} \\
   c. What is the new breakthrough dose?
   \text{Answer}

13. A patient is on 45mg of morphine every four hours. He needs a very occasional breakthrough dose.
   a. What breakthrough dose would you use?
   \text{Answer} \\
   b. What strength of morphine solution would you use and why?
   \text{Answer} \\
   c. If the pain got worse, what would the increased dose be?
   \text{Answer}

14. A patient on 100mg of morphine every four hours is still complaining of pain.
   a. Can the dose be increased further or have you reached the maximum dose?
   \text{Answer} \\
   b. If it can be increased, what would you increase it to?
   \text{Answer}
The following calculations are for use if MST tablets are available.

1. A patient has been taking 5mg of morphine liquid (NR) every four hours and her pain is well controlled.
   a. What dose of MST should she use?
      ANSWER _________________________________

2. A patient who has had 60mg of MST twice daily for a week now complains his pain is getting worse.
   a. What would you increase the dose to?
      ANSWER _________________________________
   b. What would you give as a breakthrough dose (dose and preparation)?
      Answer _________________________________

3. A patient has been taking 45mg of NR liquid morphine every four hours. MST now becomes available.
   a. What is her total daily dose?
      ANSWER _________________________________
   b. What would her dose of MST be?
      ANSWER _________________________________
   c. What would her breakthrough dose be?
      ANSWER _________________________________

Answers to morphine calculations
1. a) ANSWER: 15mg
2. a) ANSWER: 5mg (anything from 3.75–5mg is okay)
   b) ANSWER: 10mg (or twice the four-hourly dose)
3. a) ANSWER: 45mg
4. a) ANSWER: Stay on the same dose but use a breakthrough dose when he needs it.
   b) ANSWER: 10mg
5. a) ANSWER: Yes. Use a breakthrough dose half an hour before moving.
   b) ANSWER: Use 50mg/5ml solution. The patient will need only 6ml of this strength solution.
6. a) ANSWER: Yes
   b) ANSWER: 30mg every four hours 6
   c) Answer: 30 mg
7. A) ANSWER: Use 50mg/5ml solution. He then only needs 1ml which could be absorbed through the buccal mucosa.
8. a) ANSWER: His pain is reduced and he is showing signs of morphine overdose.
9. b) ANSWER: Stop the morphine for one dose and restart at half the dose. It may need to be cut even more than this.
10. a) ANSWER: Yes. With children morphine is increased exactly as with adults so the new dose would be 5mg.
11. a) ANSWER: Give him an antiemetic and give him the dose again.
12. a) ANSWER: 180mg
b) **ANSWER:** Double it to 30mg (This is the total dose for 24 hours divided into six doses.)
c) **ANSWER:** 30mg

13. a) **ANSWER:** 45mg
   b) **ANSWER:** 50mg/5ml to reduce the volume of liquid for the patient.
   c) **ANSWER:** 67.5mg. This is a rather strange amount and in practice you would probably give 65mg.

14. a) **ANSWER:** Yes it can be increased. There is no maximum dose.
   b) **ANSWER:** 150mg

**The following calculations are for use if MST tablets are available**

1. a) **ANSWER:** MST 15mg bd (every 12 hours)
2. a) **ANSWER:** MST 90mg bd
   b) **ANSWER:** 30mg of NR morphine (liquid morphine)
3. a) **ANSWER:** 270mg
   b) **ANSWER:** 135mg bd (In practice this would be impossible and they would have to take 1x100mg + 1x30mg.)
   c) **ANSWER:** 45mg NR morphine

**Instruction:**

**Exercise 5.5- Drill- prevention and management of morphine side effects**

- The trainer will go around the room and ask questions of the participants.
- Immediate feedback will be provided and different answers discussed.

1. What is the most common side effect of morphine? **Constipation**
2. What are other possible side effects? **nausea, vomiting, drowsiness**
3. How frequent are nausea and vomiting? **Moderately frequent**
4. What would you give patients on morphine to prevent constipation? **Laxatives**
5. When does drowsiness usually appear and how long does it usually last? **It develops within minutes but may take up to 48 hours to develop tolerance**
6. Is respiratory depression frequent with morphine? **No if titrated for pain score**
7. What should you do if a patient presents with twitching? **Check dose and renal status**
8. How would you treat twitching? **Readjust dose of morphine according to renal status**
9. Does itching usually disappear? **Rare side effect but doesn’t disappeared easily**
10. How would you treat itching? **Doesn’t respond to antihistamine and requires serotonin antagonists which are expensive and not available in Ethiopia**
11. How would you treat nausea and vomiting? **Use Plasigl (chlorpropamide)**
12. How would you prevent it? **Prophylaxis with plasigl before symptom starts and with morphine dose**
13. How would you treat respiratory depression? **Titrate morphine dose with the pain score and escalating not more than 30-50% every 48-72 hours**
14. How would you treat confusion and drowsiness? **Titrate morphine dose with the pain score and escalating not more than 30-50% every 48-72 hours**
15. How would you treat somnolence? **Severe side effects can be treated with naloxone**
Morphine overdose (five minutes)
- Let participants shout out any they know of.
- Have a slide, overhead projector or flip chart prepared to refer to after they have finished calling out.
- Go through the points. Explain that dehydration or renal failure can cause morphine to accumulate in the body, causing toxicity.

Managing toxicity
- Reduce the dose by 50% or stop a dose and start again at half the dose.
- If you are very concerned stop completely.
- If it is available, naloxone will reverse the action of morphine.

<table>
<thead>
<tr>
<th>Signs of morphine overdose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drowsiness that does not improve</td>
</tr>
<tr>
<td>Confusion</td>
</tr>
<tr>
<td>Hallucinations</td>
</tr>
<tr>
<td>Myoclonus (sudden jerking of the limbs)</td>
</tr>
<tr>
<td>Respiratory depression</td>
</tr>
</tbody>
</table>

Instruction: Summing up (five minutes)
- This unit contains some very important information for those about to use morphine for the first time.
- Summarize the main points and give time for questions.
- Ask everyone to think of the most important thing they have learned and what one thing they want to do differently as a result.
- They should add this to their list of personal learning points
Unit 6-Non-pharmacological Management of pain

Aim of Session: Appreciate non pharmacological approaches as supplementary or alternative therapeutic option

Unit Objective
By the end of the session, participants should be able to describe the scientific basis of non pharmacological approaches to pain management.

Enabling Objectives:
- Determine when to resort to non pharmacological approaches
- To utilize non pharmacological approaches as complementary interventions
- To utilize parallel to pharmacologic approaches and/ or as alternative to them whenever the former fails to be effective
- Determine when to resort to surgical and radiation therapy

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non pharmacologic approaches</td>
<td>Presentation</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Exercise</td>
<td>25</td>
</tr>
</tbody>
</table>

Instruction:
✓ Go through the power point slides presentation on non-pharmacological management of pain
✓ Pause for questions before proceeding with the exercises below
✓ Go around the room and starting from one end give an opportunity to every trainee
✓ Ask to identify the basic mechanism of non-pharmacologic strategy as peripheral or central inhibition or both in the following cases
✓ Identify specific strategy applied used when possible as distraction, bio-feedback, massage, hypnosis etc…
✓ Give feedbacks immediately and discuss different questions

Exercise 6.1: Drill-Non-pharmacological methods of pain control

1. 12 years old girl in pediatric ward has osteosarcoma. She claims that her pain gets better in the late evening when the duty nurses and janitors gather near her room and chat and laugh-------- central inhibition through **Distraction therapy**, she listens to the staff chat and laughter and diverting her attention away from the pain

2. A 70 years old man claims he feels less pain during any medical procedure(venipuncture, cauterization, tooth extraction etc..) if he performs his traditional war time singing called **fukera**-------- central inhibition through **Bio-feedback**, psychological enhancement of the reward pathway such as 5-hydroxytrptamine and endorphins and/ or the inhibitory **GABA pathways**
3. A 25 years old women with left mastectomy for breast cancer has lymphedema and relieves her pain in the same arm through constant rubbing and compressing ——Peripheral inhibitory through Massage therapy

4. A 40 years old man with hepatoma prefers to be alone and think about his days as a football player and star and other good memories and feels better—— Central inhibitory imagery

5. A 30 years man came with burning sensation of the left arm, all investigation ruled out any pathology, therefore he was finally given vitamin B-complex tablets and he felt better within few days and—— Central inhibitory, placebo therapy

6. A 45 years old man claims that Acupuncture he receives regularly from a Chinese run hospital in Addis helps him through his chronic back pain ——Peripheral inhibitory sensations

7. A 20 years old women claims that yoga exercise helped her neck pain problems——Exercise is a peripheral input while the meditation associated with yoga may have central inhibitory consequences

8. A 45 years old women claim relief of her low back pain whenever she uses a hot water bag compression——Hot/heat therapy, peripheral inhibition

Instruction: Summing up (five minutes)

✓ Summarize the main points and give time for questions.
✓ Ask everyone to think of the most important thing they have learned and what one thing they want to do differently as a result.
✓ They should add this to their list of personal learning points
Unit 7- Communication & Management of psychosocial, spiritual and cultural pain

**Aim of Session:** Appreciate the role of communication in eliciting psychological, social and spiritual dimensions of pain and addressing impact on physical pain and vice versa.

**Unit Objective:**
- By the end of this unit, participants should be able to apply skill of communication for better holistic patient assessment and management.

**Enabling objectives:**
- Apply the skills of communication for patient education and non-pharmacologic treatment of pain
- Describe the impact of psychological, spiritual and cultural influence and pressure on pain management and vice versa
- List major factors that influence pain sensation
- Describe the psychological, social factors, gender perspectives of pain, spiritual factors, cultural factors that influence the pain sensation

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
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<tbody>
<tr>
<td>Factors that influence pain sensation</td>
<td>Presentation</td>
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<tr>
<td></td>
<td>Role play</td>
<td>30</td>
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<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>75</td>
</tr>
</tbody>
</table>

**Use communication skills**

- ASK
- PRAISE
- ADVICE, including DEMONSTRATION (if necessary)
- CHECK, including when patient or caregiver PRACTICES (if necessary)
- EMPATHIZE
- SUPPORT PATIENT SELF-MANAGEMENT
- TOUCH where/when appropriate
- BACK UP
Instruction: ROLE PLAY SCENARIOS
Exercise 7.1: COMMUNICATION SKILLS
✓ Go through power point presentations of communication skills
✓ The following scenarios are all patients attending a small clinic where they are met
by a health professional who does not know them.
✓ Divide into two or three participants
✓ One person is to play the patient, others health professional and observer.
✓ There is no need to examine your ‘patient’.
✓ The exercise is about practicing communication skills, not necessarily arriving at a
diagnosis.
✓ Those assigned as patient can expand on the story below in any direction they want.

1. An elderly man lost his wife a few months ago. He lives in a village but his children all live
in the city and have returned there to their families. The man wants to stay in his familiar
surroundings but feels isolated without any family around him. He has painful joints and is
short of breath. The painful joints stop him working on the land and he is worried about how
he can get his field planted for the next harvest.

2. A young woman discovered an ulcer in a very private part. She has been told by her sister
that it may be a sexually transmitted disease and is worried her husband may have been
unfaithful. She has never slept with anyone else but she is afraid to tell him about the ulcer
in case he accuses her of unfaithfulness. He is a lorry driver and brings home a very good
salary which pays school fees for their two children.

3. A woman of 40 has breast cancer which has spread to her ribs and back. She has been given
medicine from the hospital which is controlling her pain, but she has come to you because
she is very worried about the future of her three children. She knows there is no treatment
for her cancer and realizes that her life is short. Her husband is a drunkard and she fears he
will not look after the children well when she dies.

4. A young single man who is a school teacher has an itchy rash all over his body. He is living
away from home and has a girlfriend. They are planning to get married as soon as he can
afford it. He is very worried about the rash as he has a friend who is HIV positive that had a
similar rash. He has never had an HIV test and does not want to have one.
One person is to play the patient, others health professional and observer.

5. A father of a 14-year-old girl who is dying of cancer. He is a successful business man and
has plenty of money to pay for treatment but he has been told that nothing can be done. He is
very angry with the doctors who have been caring for his daughter because he feels they have
failed her.

Instruction: case SCENARIOS
Exercise 7.2: communications skills and breaking bad news
✓ Go through power point presentations of communication skills for bad news
communication
✓ Divide into two or three participants
✓ The exercise is about practicing bad news communication skills(SPIKES)
✓ Those assigned as patient can expand on the story below in any direction they want.
Patient role

1. You are Miriam, a young woman of 30 years, married but with no children. You have had some pelvic pain and have been bleeding a lot. You have come for the result of a biopsy of your cervix. You have been suffering a lot and going to several doctors without any solution or clear information. You are very cooperative patient who has suffered a lot and eager to know your diagnosis once and for all.

2. You are Tessema and have come for the result of your HIV test. You have been advised to have one because you have been diagnosed as having TB. You have been faithful to your wife who you married five years ago and are sure your result will be negative. You are a difficult patient who is in denial any possibility of a positive disease.

3. You have brought your 18-month-old child Solomon with you for the result of his HIV test. You did not really want the test to be done but he has been very ill with a recurrent cough and has had difficulty breathing. He is well today after his medicine from the hospital.

Health professional role

1. You are the doctor who saw Miriam and took the biopsy. She has invasive cancer of the cervix and you will have to arrange for her to have a hysterectomy as soon as possible.

2. You saw Tessema at the TB clinic last week and you now have his positive HIV result in front of you to give him. The patient is in total denial.

3. You are the ward doctor who saw Solomon. He has been admitted four times so far this year with pneumonia and the last occasion you treated him with high dose co-trimoxazole and he responded well. You had great difficulty persuading the mother to let you do an HIV test. You must now give her the positive result.
**Instructions: Exercise 7.3**

- A list of statements on good and bad communication follows.
- Let everyone open to unit 7 of the workbook/module 4
- Tick ✓ either the T (true) or F (false) column on the right for each statement

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It is good to ask the patient probing questions in order to understand better</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>If you ask patients for clarification, they will think that you are not very good listener</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>You need to dedicate time to patients and let them know they can talk</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>If you ask questions, patients will think you are curious</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>It is OK if you write your notes while the patient talks. You can still listen.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>There is no way you can understand what the patient feels if you are not sick</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>It is good to observe the patients while they talk. Body language can tell a lot.</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>It is good to maintain eye contact.</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>It is impossible to find time to listen to patients with everything you need to do.</td>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

**Instruction: Summing up (five minutes)**

✓ Summarize the main points and give time for questions.
✓ Ask everyone to think of the most important thing they have learned and what one thing they want to do differently as a result.
✓ They should add this to their list of personal learning points
Unit 8: Special considerations in pain managements in HIV/AIDS, cancer, the elderly and in end-of life care.

Aim of Session: Focus on management of pain in HIV/AIDS, Cancer and the elderly

Unit Objective:
- By the end of the session, participants should be able to understand the special considerations in pain management in HIV/AIDS, cancer, the elderly and in end-of life care.

Enabling Objectives:
- Understand the special consideration that have to be taken in to account in pain management in HIV/AIDS
- Understand special consideration that have to be taken in to account in pain management in cancer
- Understand special consideration that have to be taken in to account in managing pain management in the elderly
- Understand special consideration that have to be taken in to account in managing pain in end of life (EOL) care

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in HIV/AIDS</td>
<td>Presentation</td>
<td>40</td>
</tr>
<tr>
<td>Cancer pain, Elderly pain &amp; end of life issues</td>
<td>Presentation</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Whole group discussion</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
<td>135</td>
</tr>
</tbody>
</table>

Exercise 8.1: Case study-pain in herpes

Zeberga is 35 years and comes to the clinic because he has pain in his back where he has blisters. It is not like real pain and he says that anything that touches it causes an awful feeling. The health worker checks his back and sees vesicles confined to a patch on the right side of his back. This is early herpes zoster; most vesicles are intact but a few are ruptured. Because the herpes is on the back rather than near the eye, Zeberga does not need to be referred (if a patient had ophthalmic herpes, referral to the ophthalmologist would be necessary).

HW: This is herpes zoster. Herpes zoster can be associated with HIV infection. Do you know your HIV status?

Zeberga: No

HW: I would advise you to get tested for HIV infection (HW now goes into pretest advice, description of treatments available if the test is positive, etc.)
Please answer the following questions:
How would you manage this case? *Counseling for an HIV test, NSAIDS and Tricyclics*
Which drug should you use for pain due to herpes zoster? *NSAIDS and Tricyclics*
What should you apply if the vesicles are ruptured? *Medicated ointments*
For which other types of pain can you use the same drug? *Neuropathic pain*
How long can the herpes take to resolve? *few days*
If a patient comes to you with herpes zoster, what should you ask him? *HIV status*
Which test would you advise the patient to have? *HIV test*
Managing Pain in cancer
Exercise 8.2: Case studies

Samuel has liver cancer and is being cared for at home after getting his diagnosis in the hospital. There is no other treatment available to cure the cancer. He is coming to the clinic for pain in his belly (abdomen). The pain is very strong and comes and goes.

Now answer the following question:
1. How would you use to manage this case?
2. Which drugs should you use for gastrointestinal pain from colic? Please list all options.
3. At which dosage should you start for each drug?

4. What should you do if the pain is not controlled with the starting dose?

Samuel comes back. His colic pain is somewhat lessened, but is still there
1. What should you do?
2. What is the maximum dosage of hyoscine you can give?

Exercise 8.3: Pharmacological pain control-adjuvant

Sara, age 60, has increased pain from her cervical tumor. She is at home for end of life care. You have consulted her doctor by cell phone and described the examination. He thinks part of the problem may be swelling around the tumor. He advises trying dexamethasone. Sara is already on morphine and she does not want to be referred. Sara is already taking paracetamol and morphine 25 mg every 4 hours for the pain.

HW: How bad is the pain, if 0 is no pain and 5 is pain as bad as childbirth?
Sara: It is 4, sometimes 5 when I wake up.

HW: Sara, I understand that your tumor pain has gotten much worse, and it seems to be related to more swelling. Since you have decided not to go back to hospital, there is a medication that we can try. It is called dexamethasone. We will start by giving you 2 mg per day. We don’t have it today but it should be in the pharmacy. Here is a prescription. We should also increase your morphine-- you can double the dose that you are taking. Please come back in 2 days or send your husband if the pain is not better.

Sarah’s husband goes to the pharmacy. Dexamethasone is not available. They only have prednisone. The pharmacist says it is the same, but Sara’s husband comes back to the clinic.

Sara’s husband: They did not have what you told us to take. They have this. Is it OK?

HW: Yes, it is OK, but you should take 14 mg (not 2 mg) every day. Please be sure to use this medication only for Sarah- it is not something to use for anyone else’s headache.

The given dosage does not resolve the pain. When Sara wakes in the morning or if her morphine is late, the pain is still bad. When she takes the higher dose of morphine, the pain is controlled, but she is less alert than she would like. Sara comes back after 3 days.

HW: Sara, we will increase the dosage to 28 mg per day. I will visit you in a few days to see if it is working.
On the visit 1 week later, Sara’s pain is better. She can use less morphine and feels better in the morning.

**Please answer the following questions:**

1. How would you use to manage this case?

2. Which drugs should you use for pain due to swelling around a tumor if the patient does not want to be referred?

3. Are prednisone and dexamethasone equivalent?

4. At which dosage should you start (please provide both prednisone and dexamethasone dosing)?

5. What should you do in case pain is not controlled with the starting dose (please provide both prednisone and dexamethasone dosing)?
   - Prednisone
   - Dexamethasone

6. What is the maximum dose of drug you can use in this case (please provide both prednisone and dexamethasone dosing)?
   - Prednisone
   - Dexamethasone

7. After how long should you discontinue the drug if pain persists?
SCENARIOS FOR END OF LIFE CARE

Exercise 8.4: A 78-year-old widow has metastatic breast cancer and no further treatment is available. She is increasingly confused and now bed bound. She is very thin and taking only sips of water. She has been in hospital for a week and is on an IV drip because she is not drinking. Her daughter wants to take her home and care for her there. Her son is adamant that she should stay in hospital and be given NG feeding “to fight the cancer.”
- What would you do and why?
- How would you counsel the family?

Exercise 8.5: Alemu is a 45-year-old man who has advanced stomach cancer. He had surgery a few months ago but the tumor has come back and he has had some episodes of gastric bleeding. He has had repeated blood transfusions, which involved long journeys to hospital, but he remains very anemic and his overall condition is frail. You are called to see him at home because he has vomited a large amount of blood. He is semi-conscious. His brother is with him and anxious he goes to the hospital for another transfusion and says: “You can’t just let him die.”
- What would you do and why?
- How would you counsel the brother?

Exercise 8.6: A 47-year-old woman has Kaposi’s sarcoma. She has had a course of chemotherapy in the past which helped for a time but the tumor has spread and she has deteriorated. She does not want further treatment as she does not want to use up all the money which has been set aside for her grandchildren’s school fees, and she knows the effect of the treatment will not last. The family asks you to persuade her to accept further treatment. They say that she is depressed, and that she has just “given up.”
- What would you do and why?
- How would you counsel the family?

Exercise 8.7 A 10-year-old boy is dying of renal failure. His whole body is swollen and he is very breathless and frightened. He is being given oxygen but keeps pulling the mask off. Regular oral morphine has been prescribed to alleviate the breathlessness and it seems to be helping, but when you come to give the next dose, his grandmother refuses, saying that the morphine will kill him. She is a retired nurse.
  - What would you do and why?
  - How would you counsel the grandmother?

Instruction: Summing up (five minutes)
- Summarize the main points and give time for questions.
- Ask everyone to think of the most important thing they have learned and what one thing they want to do differently as a result.
- They should add this to their list of personal learning points
Unit 9: National & International Policies, Guidelines & Regulations affecting Pain Management

Aim of Session: Familiarize with the international policy and national policy positions on pain management and drug availability

Unit Objective:
- By the end of this chapter participants will be able to understand national and international polices, guidelines and regulations affecting pain management.

Enabling Objectives:
- Describe the international policy and national positions on pain management,
- Analyze the impact of policy on availability and access to essential pain management drugs,
- Apply the national narcotics procurement, prescription, and disposal regulations, and
- Advocate for public education, capacity building and policy development for pain relief.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International and national policy on pain management</td>
<td>Presentation</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Whole discussion</td>
<td>group</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total time</td>
<td>90</td>
</tr>
</tbody>
</table>
Managing Pain-facilitator’s guide

Instructions: Whole group discussion
Exercise 9.1
✓ Ask participants to open module 4/workbook to unit 9
✓ Ask group to identify which of the following are True or false

- International narcotic regulatory authorities are concerned that national narcotic control laws interfere with the medical use of pain medications. **True**
- "Opiophobia," a phenomenon characterized by an exaggerated fear of the risks associated with using pain medications, can lead to prescribing more opioids than are medically necessary. **False**
- The illegal movement of controlled medications from the licit distribution system into the illicit market is called diversion. **True**
- There is an international principle which says that government efforts to prevent diversion and abuse should not interfere with the goal of ensuring availability of controlled medications for the relief of pain and suffering. It is called Balance **true**
- Morphine is stored in a double likable cabinet to be safe from diversion and theft. **True**
- In Ethiopia only physicians have the legal license, which allows them to prescribe morphine. **True**

Instruction: Exercise 9.2
✓ This is a whole group discussion
✓ Ask participants to open module 4/workbook to unit 9
✓ Ask them to identify barriers to opioid availability as related to strict regulatory control, or as other barrier

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>High cost of some opioid products - <strong>other such as importation of finished products from developed countries</strong></td>
</tr>
<tr>
<td>B</td>
<td>Physicians' concern that prescribing opioids will subject them to investigation - <strong>strict regulatory control,</strong></td>
</tr>
<tr>
<td>C</td>
<td>Complicated national prescription forms- <strong>strict regulatory control,</strong></td>
</tr>
<tr>
<td>D</td>
<td>Limits on the number of pills that can be prescribed at once - <strong>strict regulatory control,</strong></td>
</tr>
<tr>
<td>E</td>
<td>A patient with pain not having a disease diagnosis that legally qualifies for opioid prescriptions – <strong>regulations do not specifically identify diseases that qualify for morphine and leave this judgment at the discretion of physician, licensed prescriber.</strong></td>
</tr>
</tbody>
</table>
Instruction: Summing up (five minutes)
✓ Summarize the main points and give time for questions.
✓ Ask everyone to think of the most important thing they have learned and what one thing they want to do differently as a result.
✓ They should add this to their list of personal learning points
Unit 10: TEACHING METHODS FOR PAIN MANAGEMENT

Aim of Session: Familiarize with techniques to conduct classroom based pain management

*Note! This chapter is delivered only during TOT course and should be left out in cascade trainings*

Unit Objective:
- By the end of the session, participants should be able to understand and apply the techniques to conduct classroom based pain management.

Enabling Objectives:
- Prepare and deliver interactive lecturing
- Design and direct role-play
- Design and conduct case studies
- Apply drill techniques
- Design and conduct group discussions

<table>
<thead>
<tr>
<th>Topic</th>
<th>Teaching methods</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare and deliver interactive</td>
<td>Interactive Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Design and direct role-play</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Design and conduct case studies</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Apply drill techniques</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Design and conduct group</td>
<td>Group work</td>
<td>60</td>
</tr>
<tr>
<td>Discussions</td>
<td>Group presentations</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Whole discussion group</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Reflection</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total time</td>
<td>225</td>
</tr>
</tbody>
</table>

Ten tips for interactive teaching and managing groups

1. **Try to learn the names of your students** (unless the group is very large and it is a very short, one-off session). Ask students to mention their names and say one thing about themselves, and do quick sketches plan of where they are sitting. This enables you to personally ask individual students for a response, to begin to establish a more personal relationship, and gives you greater control of the group – participants are likely to be more engaged and attentive if they know you may ask them, “Now, Getachew, what would your answer be?”
2. **Always get your group speaking or moving or contributing** in some way in the first 10 minutes. Otherwise, you have set an assumption that it is you who will deliver and who have the expertise and that they do not need/have nothing to contribute.

3. **Allow as much time for feedback** as you do for the actual exercise. This validates the students’ discussion and allows you to encourage or challenge as necessary which sets a standard as to the depth of discussion you expect.

4. **Model the fact that it is OK not to know** – be prepared to admit this in response to a student’s question. You can then ask if anyone in the class can help which demonstrates that learning is reciprocal and interactive. If no one knows, suggest ways/sources to find out.

5. **Use culturally relevant everyday metaphors/analogies** to make a point and give examples and stories from real life.

6. **Revise the previous session at the beginning of the next one.** This sets an expectation that they will have learned and remembered/revised/reflected on the last session and that while sessions may be delivered separately they are interlinked and overlap.

7. **When getting students’ opinions, try to develop a deeper debate** by using phrases such as, “So, what makes you come to that conclusion?” or “Tell me a bit more about why you would choose that option” or “What is the evidence for that statement/answer?”

8. **At the start of a course or series of sessions, ask more conscientious students** (if you have been able to identify them) to go first when giving feedback from group work. This helps to set the standard for the following days/weeks.

9. **If the whole group is unresponsive, disinterested** and you feel you are ‘losing them’ put them into pairs (preferably not with the person sitting next to them) and ask them to discuss, define or otherwise work on some task and then to report back. Even if they do not want to respond to you, they will certainly respond to each other – and the physical act of moving often stimulates them emotionally and intellectually.

10. **Deal with the dominating or over-talkative participant by saying something like, Almaz, you’ve done your share of the work in this session, so let’s hear from some of those who haven’t had an opportunity...** If the problem persists, you may need to take the student aside at the end of the session, acknowledge their enthusiasm, explain your concern to involve others and invite him/her to be your ally by holding back next time.
Managing Pain-facilitator’s guide

In this unit we will briefly revise the pedagogic recommendations for the following areas:

1. Prepare audiovisual teaching aid
2. Prepare and deliver interactive lecturing
3. Design and direct role play
4. Design and conduct case studies
5. Apply drill techniques
6. Design and conduct group discussion

1. Preparing Audiovisual teaching aid(Flip chart, power point presentation and video)

Preparing flip chart for teaching

- Useful to create flowcharts, algorithms and to record group discussions and brainstorming sessions
- Mobile, inexpensive and no electricity is required
- Text can be prepared in advance
- Block letters, bullets, no more than 7 bullets
- Put in a box and use different colors
- Post the chart on the wall after discussion is over, for reference.

Power point presentations guide

- Easy and friendly computer program
- You can easily save and update teaching
- They need computer and electrical system
- Limited to seven lines and seven words

2. Prepare and deliver interactive lecturing

- Introduction must capture attention
- Restate objectives
- Relate with previous topics and future activity
- Relate to personal and students experiences
- Use case, problem, demonstration, role play
- Follow a plan using an outline
- Involve and interact students,
- Simple and easy to understand
- Smooth transitioning between topics
- Ask questions to an entire group, pause for response, if non take it to an individual

3. Design and direct role play
Managing Pain-facilitator’s guide

- Stimulates thinking by involving students in a realistic situation
- Students will be able to see from health provider, patient and family view points
- Communications and interpersonal skills to review
- Give role of health provider, client and observer to a team of trainees
- You will now do a role play. For each role play, you will need to split into groups of three people. Each of you will have a role:
  1. health worker,
  2. patient/caregiver, or
  3. observer

You will be told which role you will play.

Each person will be given a card with a scenario to read in advance.
- The health worker should read the card, and then try to conduct the visit without looking at the card.
- The patient should follow the instructions on the card when answering the health worker’s questions.
- The observer should complete the checklist of items to be addressed during the exercise, and review this with the small group at the end of the exercise.

4. Design and conduct case studies

- Case studies focus on real life situations; help develop problem solving and decision making.

To develop case studies
1. Objective: identify topic or issue the students need to focus
2. Case represents a real situation.
3. Clear directions
4. Reactions in three forms
   a. What is the root cause of the problem (analysis?)
   b. Respond to various questions in the case?
5. Solution to problems
6. Define the problem in a case study and find solutions

5. Apply drill techniques

1. Objective setting
2. Form clear statements with specific responses such as true or false or other open ended responses
3. Some should be made controversial to lead to deep discussions
4. All trainees are involved turn by turn and therefore this method makes sure all trainees contribute or participate

6. Design and conduct group discussion
Advantages of Brainstorming

- Stimulates interest in a topic
- Encourages broad creative thinking
- Allows students to share ideas without criticism
- Generates new ideas

2. How to facilitate a brainstorming session
   - Set ground rules
   - All ideas accepted, no criticism, no suggestions until end of the brain storming
   - Have record keeper and facilitator for the discussion

Summarize unit and address questions from participants before closing session
Additional exercises, drills and case studies

The following are exercises and drills from which the trainers can choose
Exercise: Role Play-Oral morphine *(unit 5)*

**Note:** You will now do a role play. For each role play, you will need to split into groups of **three** people. Each of you will have a role of:

1. health worker,
2. patient/caregiver, or
3. observer

You will be told which role you will play.

**Each person will be given a card with a scenario to read in advance.**

- The health worker should read the card, and then try to conduct the visit without looking at the card.
- The patient should follow the instructions on the card when answering the health worker’s questions.
- The observer should complete the checklist of items to be addressed during the exercise, and review this with the small group at the end of the exercise.
- If you are the health worker, have paper ready to write down your prescriptions.
### Managing Pain-facilitator’s guide

<table>
<thead>
<tr>
<th>Role</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HW</strong></td>
<td>Melaku is 40 years old and is being given oral morphine for the first time. You need to teach his wife how to give oral morphine and make sure she knows when she should contact you in case of increased pain.</td>
</tr>
<tr>
<td></td>
<td>1. <strong>Educate Melaku’s wife to:</strong></td>
</tr>
<tr>
<td></td>
<td>- Give morphine at the prescribed dose</td>
</tr>
<tr>
<td></td>
<td>- Give morphine every 4 hours (time can be estimated by the clock, the sun/moon)-do not wait for pain to return before giving next dose and give a double dose at bedtime</td>
</tr>
<tr>
<td></td>
<td>- If the pain gets worse before the next dose is due, give an extra dose-remember to say to inform you</td>
</tr>
<tr>
<td></td>
<td>- Prevent constipation by increasing fluids and bulks in diet and by giving laxative.</td>
</tr>
<tr>
<td></td>
<td>2. <strong>Educate Melaku’s wife on how morphine should be taken and show her how to do it</strong></td>
</tr>
<tr>
<td></td>
<td>- Pour a small amount into a cup</td>
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<tr>
<td></td>
<td>- Draw up the exact quantity into a syringe (without the needle) with ml marks</td>
</tr>
<tr>
<td></td>
<td>- Drop the liquid from the syringe into the mouth</td>
</tr>
<tr>
<td></td>
<td>- Put back into the bottle what remains in the cup and rinse the syringe (it can be used again)</td>
</tr>
<tr>
<td></td>
<td>3. <strong>Warn Melaku’s wife about possible side effects</strong></td>
</tr>
<tr>
<td></td>
<td>- Constipation: caregiver have to remember to give laxatives as prescribed</td>
</tr>
<tr>
<td></td>
<td>- Nausea: You should inform that it usually goes away after few days and usually does not come back</td>
</tr>
<tr>
<td></td>
<td>- Dry mouth: Caregivers should regularly give sips of water</td>
</tr>
<tr>
<td></td>
<td>- Drowsiness: This usually goes away after a few days of morphine. If it persist or gets worse, you should educate to give half dose and inform you</td>
</tr>
<tr>
<td></td>
<td>- Sweating or muscle jerks: You should educate cares to inform you about this side effect</td>
</tr>
<tr>
<td></td>
<td>4. <strong>Also, you should educate Melaku's wife to inform you if</strong></td>
</tr>
<tr>
<td></td>
<td>- Pain is getting worse since the dose should be increased</td>
</tr>
<tr>
<td></td>
<td>- Pain is getting better, since the dose might be reduced</td>
</tr>
<tr>
<td></td>
<td>- Remind her that dose should not be stop suddenly, but it needs to be decreased</td>
</tr>
<tr>
<td></td>
<td><strong>Observer</strong></td>
</tr>
<tr>
<td></td>
<td>1. <strong>Educate Melaku’s wife to:</strong></td>
</tr>
<tr>
<td></td>
<td>- Give morphine at the dose prescribed</td>
</tr>
<tr>
<td></td>
<td>- Give morphine every 4 hours (time can be estimated by the clock, the sun/moon)-do not wait for pain to return before giving next dose</td>
</tr>
<tr>
<td></td>
<td>- Give a double dose at bed time if the pain gets worse before the next dose is due</td>
</tr>
<tr>
<td></td>
<td>- Prevent constipation by increasing fluids and bulks in diet and by giving laxative</td>
</tr>
<tr>
<td></td>
<td>2. <strong>Educate Melaku’s wife on how morphine should be taken and demonstrate the process:</strong></td>
</tr>
</tbody>
</table>

**Caregiver**

If asked if you have questions, you should ask the Health worker to repeat the instructions on how to give morphine and to repeat the possible side effects.

**Observer**

Does the HW

1. Educate Melaku’s wife to:

   - Provide morphine at the prescribed dose
   - Provide morphine every 4 hours (estimated by the clock, the sun/moon) — do not wait for pain to return before giving the next dose
   - Give a double dose at bedtime if the pain gets worse before the next dose is due
   - Prevent constipation by increasing fluids and bulks in the diet and by giving laxatives

2. Educate Melaku’s wife on how morphine should be taken and demonstrate the process:
- Pour a small amount into a cup
- Draw up the exact quantity into a syringe with ml marks
- Drop the liquid from the syringe into the mouth
- Put back into the bottle what remains in the cup
- Rinse the syringe (it can be used again)

3. **Warn Melaku’s wife about possible side effects including**
   - **Constipation:** caregivers must remember to give laxatives as prescribed
   - **Nausea:** You should inform patients and caregivers that it usually goes away after few days and usually does not come back
   - **Dry mouth:** Caregivers should regularly give sips of water
   - **Drowsiness:** This usually goes away after a few days of morphine. If it persists or gets worse, you should tell caregivers to give a half dose and notify the health worker

**You should also tell Melaku’s wife to notify you if he has**
   - Sweating or muscle jerks
   - Pain that is getting worse since his dose should be increased
   - Pain that is getting better, since his dose might be reduced, **but you must remind her that dose should not be lowered suddenly, but must be decreased gradually.**

Ask her if she has any questions
Have her repeat the instructions back to you


2-Exercise: True and False -special pains

A list of statements on special pain treatment follows. Tick ✓ either the T (true) or F (false) column on the right for each statement.

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Special pains are pains where there is a special treatment (in addition to or instead of analgesics).</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Burning pain is an example of special pain.</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Nerve or spinal cord compression is an example of normal pain.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>4</td>
<td>Colic, muscle spasm, abnormal sensation are all examples of special pain</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>For burning pain, abnormal sensation, severe shooting pain (with little pain in between), or pins and needles, you can try the same drug.</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The drug of choice for the above special pains is diazepam.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>7</td>
<td>The drug of choice for the conditions listed in 5 is amitriptyline, starting at 12.5 or 25 mg at night.</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Amitriptyline is given in the morning so its effects are felt during the day.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>9</td>
<td>For muscle spasms near the end of life, diazepam at 5mg two to three times a day is the drug of choice.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>10</td>
<td>For herpes zoster you should only give acyclovir; no other treatment is good.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>11</td>
<td>Analgesic medications such as codeine or morphine are all that you need to treat special pains.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>12</td>
<td>Codeine can be used for colic pain.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>13</td>
<td>Capsicum cream is not useful for late zoster pain.</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>14</td>
<td>You must consult a doctor, medical officer or special palliative care nurse before deciding that a patient is at the end of life.</td>
<td>T</td>
<td></td>
</tr>
</tbody>
</table>

4. Exercise(unit 7)

Part 1

K is 46 year-old man coming to the clinic with his sister F for severe bone and joint pain. You have given him paracetamol (2 tablets) every 4 hours and aspirin (2 tablets) every 4 hours, overlapping and alternating the two so that he gets an analgesic every two hours. His pain persists despite the therapy. It is grade 3 when he is in bed or a chair but grade 4 when he moves. You decide to give him oral liquid morphine. You recommend 2.5 mg of morphine every four hours, and ask him to continue the paracetamol every 4 hours.

You need to teach K and his sister to manage pain and to use morphine. You will give them the Caregiver Booklet, which they can use as a reference at home and you will indicate the pages they should refer to. To make it possible for the patient and the caregiver to use the booklet effectively at home, you need to first teach them the information and skills in the booklet.
Remember to use your good communication skills:

- Ask
- Praise
- Advice, including demonstration (if necessary)
- Check, including when patient or caregiver practices (if necessary)
- Empathize
- Support patient self-management
- Touch where/when appropriate
- Back up

Now, answer the following question:

_____________________________________________________

Please list the communication skills that you would use to educate them.

_____________________________________________________

Part 2:
You now need to teach Ato K how to take oral morphine.

1. What information should you give K about the treatment?
   ____________________________________________________

2. What will you ask K to practice?
   ____________________________________________________

3. What should you do while K practices?
   ____________________________________________________

4. Give examples of good checking questions that could be used:
   ____________________________________________________
Part 3:
You will now need to explain to K and F that there are going to be times when K will not be able to take care of himself. This will not be easy for K to accept and you will need to be very sensitive.
Please write down the steps you would follow:

Now answer the following questions
1. What information would you give F and K on therapy?

2. What would you ask F to practice?

Do you think that having watched Kareem practice is enough? Explain.

3. Why is it important to encourage her to learn as well?
4. Role Play

Note: You will now do a role play. For each role play, you will need to split into groups of three people. Each of you will have a role: health worker, patient/caregiver, or observer, and you will be told which role you will play.

Each person will be given a card with a scenario to read in advance. The health worker should read the card, and then try to conduct the visit without looking at the card. The patient should follow the instructions on the card when answering the health worker’s questions. The observer should complete the checklist of items to be addressed during the exercise, and review this with the small group at the end of the exercise.

If you are the health worker, have a piece of paper ready to write down your prescriptions.
- K is a 46 year-old man coming to the clinic for severe bone and joint pain with his sister
  - F. The health care worker gave him paracetamol (2 tablets) every 4 hours and aspirin (2 tablets) every 4 hours, alternating and overlapping the two so that he gets an analgesic every two hours. His pain persists despite the therapy and the HW decided to give him morphine: 2.5 mg every four hours.

HW has to teach Kareem and his sister to manage pain and to use morphine. He has given them the Caregiver Booklet (patient information) to use as reference at home, indicating the relevant pages and explaining in detail what they need to do.
### Managing Pain-facilitator’s guide

<table>
<thead>
<tr>
<th>Role</th>
<th>Instruction</th>
</tr>
</thead>
</table>
| HW   | **You need to teach Kareem and his sister to manage pain and to use morphine at home.**  
- Advise K to be in charge of his own care as much as possible  
- Explain that K should be the one to remember to take his medicine. It is very important that he take care of himself.  
- Indicate which pages in the booklet contain information on oral morphine.  
- Explain in words that K and F can understand.  
- Demonstrate clearly how to take morphine.  
- Ask good checking questions.  
- Have K practice in front of you.  
- Praise K for what he does well.  
- Correct him when he makes a mistake.  
- Explain to F, K’s sister that she needs to learn to give morphine as well.  
- Ask her to practice while you watch.  
- Praise F for what she does well.  
- Correct her mistakes.  
- Reassure them that you will continue to back them up |
| Kareem | **If asked by the Health worker,**  
- Question anything that is not clear  
- Ask if the HW will continue to back you up.  
- K: Draw up too much morphine and allow the HW to correct you.  
- F: Leave remaining morphine in the cup and allow the HW to correct you. |
| Observer | **Does the health care worker:**  
- Advise Kareem to be in charge of his own care as much as possible.  
- Explain that K should be the one to remember to take his medicine.  
- Indicate which pages in the booklet contain information on oral morphine.  
- Explain in words that K and F can understand  
- Demonstrate clearly how to take morphine  
- Ask good checking questions  
- Ask K to practice  
- Correct K’s mistakes  
- Praise him for what he does well  
- Explain to F that she needs to learn to give morphine as well.  
- Ask F to practice  
- Correct F’s mistakes  
- Praise her for what she does well  
- Reassure them that he/she will continue to back them up |

### 5. Demonstration: Are the facilitators using good communication skills? (Unit 7)

Now you will watch a role play. This time you will not participate. The facilitator and the actor patients will show you good and bad examples of communication with patients and caregivers.

In list 1, write down what they do well, and in list 2, write down any communication mistakes that you see.

**Role Play 1:**

**List 1: Examples of good communication with patient and caregiver**
**Role play**

**Note:** You will now do a role play. For each role play, you will need to split into groups of **three** people. Each of you will have a role:

1. health worker,
2. patient/caregiver, or
3. observer

You will be told which role you will play.

Each person will be given a card with a scenario to read in advance.

- The health worker should read the card, and then try to conduct the visit without looking at the card.
- The patient should follow the instructions on the card when answering the health worker’s questions.
- The observer should complete the checklist of items to be addressed during the exercise, and review this with the small group at the end of the exercise.

If you are the health worker, have paper ready to write down your prescriptions.

M is coming to see you because she has HIV/AIDS. She is fine right now, but she has been very sick in the last month and lost a lot of weight. She is scared she might get sick again. The health worker needs to support and counsel M.

<table>
<thead>
<tr>
<th>Role</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW</td>
<td>You need to support and counsel M YOU:</td>
</tr>
<tr>
<td></td>
<td>- You sit down and are prepared to spend time to listen to her. Mary needs to know that you have time to let her talk</td>
</tr>
<tr>
<td></td>
<td>- You observe her. Her body language is telling you that she is scared (she breaths frequently and she is about to cry)</td>
</tr>
<tr>
<td></td>
<td>- You let her talk without interrupting and empathize. You do not do write or read or do something else. You maintain eye contact</td>
</tr>
<tr>
<td></td>
<td>- Once she is finished you ask questions like &quot;Did you really stay in bed for two weeks with vomiting and diarrhea? This must have been terrible&quot;</td>
</tr>
<tr>
<td></td>
<td>- Say things to show that you are empathizing &quot;Tell me how you feel about it. I can really understand what you went through and understand that you do not want to go through this anymore&quot;</td>
</tr>
</tbody>
</table>
|      | - Ask question like "When did it happen?" "Who helped you?", "Do you think that if this will happen again will you need some support from us?", "Could you find food that did not disturb you too much?"
<p>|      | - Try to explain that she will have all her support she needs if this will happen again. |
|      | - Educate her in what do to take care of herself better and check if she has somebody at home to help |
|      | - Reassure that somebody from the clinic will visit her when needed |
|      | - Hold her hand, if appropriate |
| M    | You should speak about how scared you are of HIV/AIDS. You are scared of getting sick again. |
|      | - You have had vomiting and diarrhea for a long time and you lost a lot of weight. Your neighbor stopped by sometimes to see how you were but you felt very lonely. |</p>
<table>
<thead>
<tr>
<th><strong>Observer</strong></th>
<th><strong>Does the health care worker</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Sit down, prepared to spend time to listen to her.</td>
</tr>
<tr>
<td></td>
<td>- Observe M and watch her body language</td>
</tr>
<tr>
<td></td>
<td>- Let her talk without interrupting.</td>
</tr>
<tr>
<td></td>
<td>- Stop writing or reading or doing anything else</td>
</tr>
<tr>
<td></td>
<td>- Ask questions like &quot;Did you really stay in bed for two weeks with vomiting and diarrhea? That must have been terrible&quot;</td>
</tr>
<tr>
<td></td>
<td>- Say things to show empathy like, &quot;Tell me how you feel about it. I can really understand that you do not want to go through this anymore&quot;</td>
</tr>
<tr>
<td></td>
<td>- Ask questions like &quot;When did it happen?&quot; &quot;Who helped you?&quot;, &quot;Do you think that if this will happen again will you need some support from us?&quot;, &quot;Could you find food that did not disturb you too much?&quot;</td>
</tr>
<tr>
<td></td>
<td>- Try to explain that she will have all the support she needs if this will happen again.</td>
</tr>
<tr>
<td></td>
<td>- Educate her in what do to take care of herself better</td>
</tr>
<tr>
<td></td>
<td>- Check if she has somebody at home to help</td>
</tr>
<tr>
<td></td>
<td>- Reassure that somebody from the clinic will visit her when needed</td>
</tr>
<tr>
<td></td>
<td>- Hold her hand, if appropriate</td>
</tr>
</tbody>
</table>

You are alone because your husband left you.
5. **Problem solving, communication exercise (unit 7)**
For each situation listed in the left column, briefly describe what you would say or do.

<table>
<thead>
<tr>
<th>What would you say or do if?</th>
<th>Briefly write your ideas below</th>
</tr>
</thead>
<tbody>
<tr>
<td>A patient is afraid he/she will not be cared for properly at home.</td>
<td>1. Why does he think so?</td>
</tr>
<tr>
<td></td>
<td>2. How can we achieve better care at home?</td>
</tr>
<tr>
<td></td>
<td>3. Would training of family at home solve some of the problem?</td>
</tr>
<tr>
<td></td>
<td>4. What kind of support does the family or care giver at home need?</td>
</tr>
<tr>
<td>A patient does not know how to draw morphine from the bottle into the syringe.</td>
<td>1. Demonstrate how to draw morphine using syringe</td>
</tr>
<tr>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td>4.</td>
</tr>
<tr>
<td>A patient comes to see you feeling terrible.</td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td>4.</td>
</tr>
<tr>
<td>A caregiver is worried to be able to give the necessary care.</td>
<td>1. Why does he think so?</td>
</tr>
<tr>
<td></td>
<td>2. How can we achieve better care at home?</td>
</tr>
<tr>
<td></td>
<td>3. Would training of family at home solve some of the problem?</td>
</tr>
<tr>
<td></td>
<td>4. What kind of support does the family or care giver at home need?</td>
</tr>
<tr>
<td>A patient comes to you and you do not understand what the problem is.</td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td>3.</td>
</tr>
</tbody>
</table>

7. **Review Role plays for assessment of pain (unit 3)**

**Lesson plan:**
There will be three case studies (A, B, C) for each role play section which will be played by three participants who will alternatively play the role of the patient, health care worker and observer. At the end of the role play, the trainer will give feedback to participants and explain the steps not performed correctly.

**Player 1 will be:**
1. the health worker in case A,
2. the patient in case B
3. observer in case C
Managing Pain-facilitator’s guide

Player 2 will be
1. the care giver in case A,
2. the observer in case B,
3. the health worker in case C

Player 3 will be
1. the observer in case A,
2. the health worker in case B,
3. the patient in case C

Read the part you have been assigned to in the role play card.
- If you are the health worker, you can keep the card with you during the role play but try to use it only as an aid tool if you do not remember something.
- If you are the observer you will keep the card and check everything the HW will do in the list provided.
- If you will be the HW, please remember to use the communication and palliative care skills you learned in the previous sections.

<table>
<thead>
<tr>
<th>Health Worker</th>
<th>Patient /or care giver</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Role play Exercise: Instruction card Player 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Case</strong></td>
<td><strong>Role</strong></td>
<td><strong>Instructions</strong></td>
</tr>
</tbody>
</table>
| A | HW | Sara is a 35 year old woman affected by HIV/AIDs. She is at the end of life. She has lost 9 kilos in the last three months because of persistent nausea and vomiting for which she could barely eat.

She has not eaten in the past days. She is weak and has a lot of pain (despite 25mg of morphine every 4 hours). Her husband understands she is about to die and comes to the health care facility to ask what he can do. He fears he will not be able to cope with the death and that Sara will die in pain and agony. Also, he feels responsible for her illness and has fears of being alone at the moment of death and not to being able to recognize Sara’s death.

YOU:
- Listen actively to Sara’s husband addressing his concerns.
- Keep in mind all different emotions he is experiencing: shock, denial, disbelief, guilt, anger, depression, anxiety.
- Give any anticipatory guidance on what to expect: tell him that Sarah might decrease social interaction, will decrease food and drink intake more and more, might have changes in elimination and might changes in breathing: grunting, death rattle.
- Explain that family members will have to continue talking to her-hearing remains intact even when comatose- and to use therapeutic touch (holding hand).
- Explain to keep Sara's mouth clean and moist, take care of skin and pressure areas by turning her every two hours (alternating the side she is lying to prevent aspiration).
- Increase morphine to 50mg every 4 hours to control pain.
- Explain that extremities may become cold and greyish heart rate will decrease. This will mean that Sara is dying. |
<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td><strong>Managing Pain-facilitator’s guide</strong></td>
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<tr>
<td><strong>B</strong></td>
<td><strong>Care giver</strong></td>
</tr>
<tr>
<td></td>
<td>Explain simply that when death will occur, Sara will stop breathing completely, heartbeat and pulse will stop, she will become unresponsive and skin tones will change from white to grey.</td>
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<tr>
<td></td>
<td>Ask how Sara's husband feels and how he will cope with the loss of his wife (children caring, etc).</td>
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<td></td>
<td>Offer bereavement counseling to Sara's husband, supporting him and trying to practically help.</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td><strong>Observer</strong></td>
</tr>
<tr>
<td></td>
<td>Your brother is 40 years old and has HIV/AIDS. You go to the doctor with because he has severe pain in his mouth (for which he is not eating) and sharp pain due to infection of nerve by HIV.</td>
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<tr>
<td></td>
<td>Apparently everything is fine with him, but you noticed that lately he is changing behavior, he is abnormally sad, has insomnia and loss of interest.</td>
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<tr>
<td></td>
<td>The HW visits the home of a bedridden patient who is 40 years old. He has infected bedsores in his back and he is in a lot of pain. Additionally, in the past three days he has developed bothersome cough and fever and he can hardly sleep. All he took so far is a local remedy for his cough which is not appropriate. His wife has tried to wash the bedsores but nothing else.</td>
</tr>
<tr>
<td></td>
<td><strong>Does the HW</strong></td>
</tr>
<tr>
<td></td>
<td>Check if there are signs of infection in the bedsores (there is crushed metronidazole tablet and sprinkle on the sores to cover area)?</td>
</tr>
<tr>
<td></td>
<td>Explain that bedsores should be cleaned everyday with dilute salt water, fill them with honey and covered with a clean light dressing?</td>
</tr>
<tr>
<td></td>
<td>Explain that pressure has to be kept off area and that regular turning every two hours must be done?</td>
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<tr>
<td></td>
<td><strong>Teach to prevent sores by:</strong></td>
</tr>
<tr>
<td></td>
<td>Explaining that patient should sit in a chair from time to time.</td>
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<tr>
<td></td>
<td>Encouraging the sick person to move in bed.</td>
</tr>
<tr>
<td></td>
<td>Keeping the beddings clean and dry and put extra soft material under the patient.</td>
</tr>
<tr>
<td></td>
<td>Asking if cough or pain is keeping him awake in the night or if he has some other problems.</td>
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<tr>
<td></td>
<td>Grading the pain he has (severe).</td>
</tr>
<tr>
<td></td>
<td>Asking if he has dry or productive cough (dry cough).</td>
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<tr>
<td></td>
<td>Giving low dose of morphine (2.5mg/4 hours) for both pain and cough relief.</td>
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<td></td>
<td>Giving antibiotics.</td>
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<tr>
<td></td>
<td>Providing counseling to help with trouble sleeping.</td>
</tr>
<tr>
<td></td>
<td>Providing counseling to his wife and give practical example to avoid burn out.</td>
</tr>
<tr>
<td></td>
<td>Tactfully explaining that what they are using for cough is not appropriate respecting their trust in the local healers.</td>
</tr>
</tbody>
</table>
**Role play Exercise: Instruction card Player 2**

<table>
<thead>
<tr>
<th>Case</th>
<th>Role</th>
<th>Instructions</th>
</tr>
</thead>
</table>
| A    | Observer        | - Sara is a 35 year old woman affected by HIV/AIDS. She is at the end of life. She has lost 9 kilos in the last three months because of persistent nausea and vomiting for which she could barely eat.  
- She has not eaten in the past days. She is weak and has a lot of pain (despite 25mg of morphine every 4 hours). Her husband understands she is about to die and comes to the health care facility to ask what he can do. He fears he will not be able to cope with the death and that Sara will die in pain and agony. Also, he feels responsible for her illness and has fears of being alone at the moment of death and not to being able to recognize Sara's death. |

**Does the HW:**
- Listen actively to Sara’s husband addressing his concerns  
- Keep in mind all different emotions he is experiencing: shock, denial, disbelief, guilt, anger, depression, anxiety  
- Give any anticipatory guidance on what to expect: tell him that Sarah might decrease social interaction, will decrease food and drink intake more and more, might have changes in elimination and might changes in breathing: grunting, death rattle.  
- Explain that family members will have to continue talking to her-hearing remains intact even when comatose- and to use therapeutic touch (holding hand  
- Explain to keep Sara's mouth clean and moist, take care of skin and pressure areas by turning  
- her every two hours (alternating the side she is lying to prevent aspiration).  
- Increase morphine to 50mg every 4 hours to control pain  
- Explain that extremities may become cold and greyish heart rate will decrease.  

**This will mean:**
- That Sara is dying.  
- Explain simply that when death will occur, Sara will stop breathing completely, heartbeat and  
- Pulse will stop, she will become unresponsive and skin tones will change from white to grey.  
- Offer bereavement counseling to Sara's husband.  

| B    | Health worker   | The patient is a 40 year old man with HIV/AIDS that has come to see the doctor with his sister because of severe pain in his mouth (for which he is not eating) and sharp pain due to infection of nerve by HIV. Apparently everything is fine with him, but his sister says that lately he is changing behavior, he is abnormally sad, has insomnia and loss of interest.  
- Assess pain  
- Take a history of each pain separately |
- Determine the type of pain
- Look at the mouth
- Grade by asking the following:
  - Give paracetamol 500 mg (2 tablets every 4 hours) and two tablets of Aspirin at night
  - Give a special pain treatment (amitryptiline)
  - Give treatment for candida (nystatin)
  - Write out individualized card
  - Explain to patient and/or care giver how and when to take drugs
  - Explain what to eat at home to avoid losing weight
  - Talk to the patient to determine cause of depression. Assess if there is suicide risk.
  - Support the patient and care (do not give drugs for now).
  - Educate both of them on home care using the care giver booklet.

<table>
<thead>
<tr>
<th>C</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You are a bedridden patient who is 40 year old. You have bedsores in your back and you are in pain.</td>
</tr>
<tr>
<td></td>
<td>If asked by the HW, it is a severe pain (from 1 to 5 is 5).you also have cough and fever for which you can hardly sleep.</td>
</tr>
<tr>
<td></td>
<td>If asked, say that all you took so far local remedy for cough suggested by the traditional healer and that your wife has tried to wash the bedsores but nothing else.</td>
</tr>
</tbody>
</table>
Role play Exercise: Instruction card Player 3

<table>
<thead>
<tr>
<th>Case</th>
<th>Role</th>
<th>Instructions</th>
</tr>
</thead>
</table>
| A    | Care giver   | Sara is a 35 year old woman affected by HIV/AIDS. She is at the end of life. She has lost 9 kilos in the last three months because of persistent nausea and vomiting for which she could barely eat. She has not eaten in the past days. She is weak and has a lot of pain (despite 25mg of morphine every 4 hours). Her husband understands she is about to die and comes to the health care facility to ask what he can do. He fears he will not be able to cope with the death and that Sara will die in pain and agony. Also, he feels responsible for her illness and has fears of being alone at the moment of death and not to being able to recognize Sara's death.  
   **If asked by the health worker**, you will explain him that you understand that she is about to die and comes to the health care facility to ask what you can do. You fear of not being able to cope with the death that Sara's will die in pain and agony. Also, you feel guilty since you were the one infecting Sara. You have three children and you do not know what to do after. You fear being alone at the moment of death and not to be able to recognize it. |
| B    | Observer     | The patient is a 40 year old man with HIV/AIDS that has come to see the doctor with his sister because of severe pain in his mouth (for which he is not eating) and sharp pain due to infection of nerve by HIV. Apparently everything is fine with him, but his sister says that lately he is changing behavior, he is abnormally sad, has insomnia and loss of interest.  
   **Does the HW**  
   - Assess pain  
   - Take a history of each pain separately  
   - Determine the type of pain and grade it  
   - Give paracetamol 500 mg (2 tablets every 4 hours) and two tablets of Aspirin at night  
   - Look at the mouth  
   - Give a special pain treatment (amitryptiline)  
   - Give treatment for candida (nystatin)  
   - Write out individualized card  
   - Explain to patient and/or care giver how and when to take drugs  
   - Explain what to eat at home to avoid losing weight  
   - Talk to the patient to determine cause of depression. Assess if there is suicide risk.  
   - Support the patient and carer (do not give drugs for now)  
   - Educate both of them on home care using the care giver booklet. |
| C    | Health worker| You visit the home of bedridden patient who is 40 year old. He has infected bedsores in his back and he is a lot of pain. Additionally, in the past three days he has developed bothersome cough and fever and he can hardly sleep. All he took so far is a local remedy for his cough which is not appropriate. His wife has tried to wash the bedsores but nothing else.  
   **You**  
   - Check if there are signs of infection in the bedsores (there is crushed metronidazole tablet and sprinkle on the sores to cover area.  
   - Explain that bedsores should be cleaned everyday with dilute salt water, fill them with honey and covered with a clean light dressing. |
### Teach to prevent sores by

- Explaining that a patient should sit in a chair from time to time.
- Encouraging the sick person to move in bed.
- Keeping the beddings clean and dry and put extra soft material under the patient.

Ask if cough or pain is keeping the patient awake in the night or if he has some other problems.

- Grade the pain he has (severe).
- Ask if he has dry or productive cough (dry cough).
- Give low dose of morphine (2.5mg/4 hours) for both pain and cough relief.
- Give antibiotics.
- Provide counseling to help with trouble sleeping.
- Provide counseling to his wife and give practical example to avoid burn out.
- Tactfully explain that what they are using for cough is not appropriate respecting their trust in the local healers and suggest.

### 8. Exercise: Case studies for units 4 and 5

1. A 46 year old woman with known metastases to the back bone and left femur from breast cancer has pain in respective sites. She is taking morphine 10mg every 4 hours and getting satisfactory relief of pain. However, she noticed nausea with the morphine and is reluctant to keep taking the medicine. How do you address this?

   **Answer:**
   - To start anti-nausea with morphine in some vulnerable cases
   - Nausea may occur with one opioid and not with another, so one of the approaches to this problem would be to change to an equianalgesic dose of another opioid such as oxycodone or hydromorphone.
   - External beam radiation therapy
   - Nausea may occur with morphine, so the cause must be related to something besides the morphine.

2. A 58 year old man with prostate cancer and bone pain started morphine at a dose of 5-10 mg every 4 hours as needed. After 2 days, he reports good pain relief, but he complains of not having a bowel movement in one week.

   **Answer:**
   - Tolerance does not develop to the constipating effect of opioids, so a bowel regimen should be started to produce a bowel movement at least every other day; the dose of opioid should stay the same, since the patient is getting good pain control.
3. A 55 year old woman with right apical lung cancer has developed pain in her shoulder which radiates to her medial forearm and hand. She describes the pain as burning and stinging and rates the severity of the pain as 8/10 or severe.

What is the diagnosis and treatment?

Answer:
- The diagnosis is made of brachial plexopathy from direct extension of the lung tumor. In addition to an opiate, treat with adjuvants available: Gabapentin, Carbamazepine, Capsaicin cream, Nortriptyline

4. A 38 year old woman is bedbound due to a vertebral disk prolapsed, and is having severe pain rated 9/10 when she tries to walk to the bathroom. If she lies quietly she rates her pain as moderate or 4/10.

Answer:
- Incident pain, meaning it is related to an identifiable activity or event, treated by giving extra pain medication prior to anticipate activity which would cause the pain.
- This is not End of dose failure, which is when pain is relieved by medication but it recurs quickly

5. A 55 year old man is having pain from his hepatoma. Morphine 5mg tablets are given every four hours, but his pain is not relieved. He reports that an hour after each morphine tablet, there is only partial relief of pain, from 9/10 to 7/10. Which intervention would be the next step?

Answer:
- Give 10mg morphine instead of 5mg, every 4 hours, because the time to peak effect from oral morphine is 45-60 minutes, so lack of adequate analgesia suggests his dose is not high enough.

6. A 72 year old woman with advanced cervical cancer is having sever pelvic pain which has been relieved with 90mg of morphine by mouth every 8 hours. Over the past few days, she has lost the ability to swallow and her death appears imminent. After reassessing her pain and discussing your findings with her husband, you decide to give morphine subcutaneously.

What is different about drug administration here? What dose would be an equianalgesic subcutaneous dose of morphine?

Answer:
- Dosing is spaced due to accompanying renal function test and signs of toxicity.
- 30mg morphine subcutaneously is equianalgesic to 90mg of morphine orally.

7. A 92 year old man with advanced dementia fell from bed and sustained a hip fracture. His conditions to frail to undergo surgery and is left for conservative management. He is
cooperative with oral analgesia. When he is lying in bed, he moans occasionally but can be consoled, but with attempts to provide personal care such as hygiene or bathing, he cries out, grimaces, and pushes family away. Which response best describes his pain and a treatment plan?

**Answer:**
- He is having moderate pain at rest and severe breakthrough pain associated with movement (incident type breakthrough pain); give oral morphine q 4 hours scheduled for rest pain, and for breakthrough pain, provide a dose of oral morphine (start with 10% of the total daily dose) about one hour before providing personal care.

8. Which statement is NOT true about the major types of physical pain?
   A. Nociceptive pain results from damage or change to peripheral or central nervous system pathways false
   B. Neuropathic pain results from damage or change to peripheral or central nervous system pathways.
   C. Physical pain is divided into nociceptive, neuropathic, or mixed types.
   D. Neuropathic pain is typically felt as "tingling," "burning," "shooting," "stabbing."
   E. Skin, muscle, joint, and viscera contain nociceptive neurons which respond to stimuli by afferent transmission to the spinal cord dorsal horn and upward to the thalamus, limbic system, and cerebral cortex of the brain.

9. A 45 year old man with advanced pancreatic cancer is having severe epigastric pain. His pain treatment started with oral morphine 5mg every 4 hours, but now he is taking 15mg every 4 hours and his Numeric Pain Scale scores are 8/10 one hour after morphine 15mg. Which statement below describes a plan that is NOT good pain management for this man?

**Answer:**
1. Consider the concept of Total Pain, and seek to relieve other forms of suffering besides physical pain, such as emotional distress, spiritual or existential suffering, and/or social or interpersonal distress.
2. Continue giving morphine as described above under #1, since there is no limit to the amount of opioid, except for intolerable side effects.
3. Continue the same dose of morphine 15mg orally every 4 hours for one day, and then increase the dose by 10% every 24 hours.
4. Consider adding an adjuvant pain medication (without reducing the opioid dose at first), such as acetaminophen, dexamethasone or others.

10. An eight year old girl has recently been diagnosed with a progressive dilated cardiomyopathy. She has been treated with acetaminophen around the clock for pain that she has in her legs from peripheral edema. However, she still complains of 8/10 pain at baseline and it worsens to 10/10 when she is ambulating. What is the next best choice for pain control?
Answer:
- Tramadol

9. Counseling Cases for unit 7

Case 1
Lemlem is a 30 years old HIV positive for the last 2 years and started ART but has poor adherence. She has oral ulcer from Kaposi sarcoma and is taking Tramadol 100mg every 8 hrs with only 50% control of pain. She is a merchant and unable to adhere due to her nature of work and forgetting. Her husband died leaving her three children to care. She is doing a small business in Addis with her friends. She has a fear of stigma and discrimination from her business partners and may lose her livelihood. Physically she appears very weak, though she reports that she feels good. As she reported she is missing 7-10 pills per month, takes the pills thirty minutes late every day. The report from ART unit has also shows that she has poor adherence and resistant for all instructions.

She admitted that she feels guilty about a number of her acts in the past. She was from good family but left her home and went into prostitution for easy money and life. And she didn’t tell her husband about this when they got married. She feels God is punishing her for her sins. She also is not adherent because she also takes holy water and whenever she takes it she stops the drugs and sometimes because she forgets it.

Problem
1. oral ulcer pain
2. drug adherence due religious issue and inconvenience with work
3. spiritual problem of guilt and confusion about holy water
4. Claims forgetting to take drug due to hectic working day and often due to fear of stigmatization.
5. She couldn’t bring any option on how to improve her adherence, work on her health to make it better and check her Cd4.

Session one
✓ It was possible to get and talk only, one session.
✓ As a protocol the rapport building was also applied to make her feel at ease as she seems timid and covert.
✓ From her words it was clear that she is not comfortable to talk on these issues and wants to leave the room and purposely denies things.
✓ Some of the options seen were
✓ She needs psychiatric support and anxiolytic for the extreme anxiety due to guilt
✓ To discuss with her niseha abat about confession and peace with her God
✓ She can take both holy water and drugs
✓ Discussing on how to use a memory aid using her mobile alarm which will remind her.
✓ Another way out mainly that would help her to adjust her in taking her pills in the presence of her work mates are to use different mechanism or be systematic by looking the existing scenario.
Further planning to improve the adherence was discussed. Moreover, the benefit of strictly adhering to treatment was reviewed.

Case 2
Bekelech is 30 years old lady who knew her HIV status two years earlier and started ART. Her husband is HIV negative but they agreed to live together despite their discordant result by applying all the positive living principles. She is in a very good health condition, well adhering to the drug, doing her routines as anybody else. She use condom consistently with her husband not to infect him.

She has severe pelvic pain due to cervical cancer and is on Morphine 10mg 4 hrly and on waiting list for palliative radiotherapy. Pain was well controlled until 2 weeks ago when it got worse and is persisting in spite of increasing morphine to 15 mg 4 hrly and some sedating and vomiting toxicities being manifested.

Very recently, a condom was ruptured during sexual intercourse. It made both husband and wife anxious, the fear of infecting her husband and becoming pregnant is worrying her a lot. She didn’t see her menstruation since then. Within a month time she test for pregnancy three times within a week gap in between and all turned negative. She still have a doubt on the result and unable to trust it due to sign and symptoms she is feeling now; nausea, rash and gorging of nipples which she thought a sign of pregnancy as she knew from her experience. The doctors repeatedly told her and tried to convince her to relay on the test result though she is not willing and comfortable on that. This is the case she referred and came for counseling.

Problem
Pain worsening
The main problem of this client is not be able to trust her pregnancy result,
- fear of infecting her husband and confusion
- Fear of getting pregnant: pregnancy signs like loss of menstruation and engorged breasts are a case in point.

Session one:
✓ It is a one shot counseling mainly focusing on her thought.
✓ As usual the counselor helps her to feel relaxed.
✓ Trying to make a shift on her thought and liberate from all related reactions.
✓ The first step in doing this is clearing out all the misconceptions she has by presenting her facts on menstrual irregularities including the probable reason of ART, stress related things and any other medical reason.
✓ Secondly, a thought exercise was demonstrated and applied that will help her to accept and trust the result.
✓ Finally, it has been reached on agreement to retest for it and accepts the result.
✓ Using revitalization and self-reinforcement techniques, which is an aspect of a health belief model.
Case 3
Frezewd is 35, divorced and currently living with her 9 years old child. Her older child, 19 lives with her grandparents and the boy who is 13 with his father. She used to work hard, was confident and sociable. she developed extensive herpes zoster rash affecting t1-4 dermatom 6 month ago and now has scare and has severe and sharp burning pain of 3 months.

Suspecting HIV and with the push of her friend, she tested for HIV two years ago, the result turned positive. After the test much of her things has changed, namely hopelessness, irritation, boredom, low appetite, rage, and social withdrawal. Even her relation and communication with her parents is worsened which was not her real self and behavior. She was leading her livelihood from her kiosk, but now she left it tired of the competition. She is frequently quarreling with her mother and sister for the reason which has no ground. She is also worried about her ex-husband health condition as it is deteriorating when she sees him. All this things makes her life too difficult to live and adjust. She came to ART clinic for check up, her CD4 becomes 144 and still with some OIs. For her starting the ART seems difficult because of the misconception and attitudes on the drug. She has however accepted pain treatment with Diclofenac50MG BD and Amitryptilline 25 mg daily but pain is only 50% CONTROLLED

Problem:
NEUROPATHIC PAIN
- Fear of starting the treatment,
- Worry about her 9 years old child,
- Managing disturbed social relationship.
Session one:

- The counseling was started by initiating relaxation therapy including deep birthing, muscle relaxation, and positive self-thought exercise.
- Such cases are common among HIV positive individuals and the larger community. This is due to mental preoccupation and high level of hunch conclusion.
- To manage such cases the counselor needs to go beyond the limits, help them to revitalize this thought patterns.

This will be done by using revitalization and self-reinforcement techniques, which is an aspect of a health belief model.
### Glossary of pain terminologies

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Allodyna</td>
<td>Pain in response to a non-nociceptive stimulus</td>
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<tr>
<td>Hyperalgesia</td>
<td>Increase pain sensitivity</td>
</tr>
<tr>
<td>Dysaesthesia</td>
<td>Unpleasant provoked or spontaneous sensation</td>
</tr>
<tr>
<td>Analgesia</td>
<td>Absence of pain in response to noxious stimuli</td>
</tr>
<tr>
<td>Causalgia</td>
<td>Syndrome of allodynia, hyperpathia following traumatic nerve injury and accompanied by vasomotor dysfunction and trophic changes</td>
</tr>
<tr>
<td>Cramp</td>
<td>A pain-full spasm of one or several muscles</td>
</tr>
<tr>
<td>Hyperaesthesia</td>
<td>Increase sensitivity to stimulation</td>
</tr>
<tr>
<td>Hypoesthesia</td>
<td>Decreased sensitivity</td>
</tr>
<tr>
<td>Hyperpathia</td>
<td>Abnormal and exaggerated reaction to pain, particularly repeated</td>
</tr>
<tr>
<td>Myofascial pain</td>
<td>Muscle disorder (fibromyalgia) characterized by presence of one or more hypersensitive points/ trigger points leading to spasm, tenderness limitation of movement, weakness and occasionally autonomic dysfunction.</td>
</tr>
<tr>
<td>Neuralgia</td>
<td>Pain in the distribution of a nerve</td>
</tr>
<tr>
<td>Parasthesia</td>
<td>Abnormal evoked or spontaneous sensation</td>
</tr>
<tr>
<td>Pain threshold</td>
<td>Minimal intensity of pain that is perceived as painful</td>
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<tr>
<td>Pain tolerance</td>
<td>Maximum intensity patient is willing to tolerate</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Increased responsiveness of neurons to detect even sub-threshold inputs</td>
</tr>
<tr>
<td>Spasm</td>
<td>Sustained and involuntary muscle contraction</td>
</tr>
<tr>
<td>Sensation threshold</td>
<td>Least stimulus perceived as sensation</td>
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### APPENDICIES

#### Tools for evaluation of course

1. **I can assess a palliative care patient’s pain**

<table>
<thead>
<tr>
<th>Very confident</th>
<th>Reasonably confident</th>
<th>Not confident</th>
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<tbody>
<tr>
<td>10</td>
<td>5</td>
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2. **I understand the WHO three-step analgesic ladder**

<table>
<thead>
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<tbody>
<tr>
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</table>

3. **I understand how to prescribe opioid analgesic drugs such as morphine**

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<tr>
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<th>Not confident</th>
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4. **I understand the role of palliative care and pain management for patients with cancer, HIV/AIDS and other chronic illnesses.**

<table>
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<tr>
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5. I understand what is meant by holistic history taking.

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6. I can discuss anxiety with a palliative care patient

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7. I understand the different models/settings for palliative care and their advantages and disadvantages

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<tr>
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8. I feel equipped to break bad news to patients

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<tbody>
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</table>

9. I understand how to prescribe opioid analgesic drugs such as Tramadol

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</table>
10. I have a basic understanding of the complexities behind narcotic drug control laws and advocacy initiatives for “opioid availability” both at the national and international levels

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2-Pre and post-test evaluation with answer key

Test questions on pain management

I. GENERAL
   1. Does the patient’s cultural background affect pain expression and management?
      a) Yes
      b) No
      c) Do not know
   2. Do myths and misinformation contribute to ineffective pain management?
      a) Yes
      b) No
      c) Do not know
   3. People in pain always report their pain to their health care provider.
      a) Yes
      b) No
      c) Do not know
   4. People in pain demonstrate or show that they have pain - pain can be seen in the patient’s behavior.
      a) Yes
      b) No
      c) Do not know
   5. The level of pain is often exaggerated by the patient;
      a) Yes
      b) No
      c) Do not know
   6. Generally a patient cannot be relieved of all pain;
      a) Yes
      b) No
      c) Do not know
   7. Some pain is good so that the patient’s symptoms are not masked;
      a) Yes
      b) No
      c) Do not know
   8. Newborn infants do not have pain;
      a) Yes
      b) No
      c) Do not know
II. PAIN ASSESSMENT
1. What are the two categories of pain?
   a) Somatic and Musculoskeletal
   b) Nociceptive and Neuropathic
   c) Nociceptive and Somatic
   d) Neuropathic and Musculoskeletal
   e) Visceral and Neuropathic
2. What questions should you ask if a patient comes to see you because of pain?
   a) Severity, timing, location, radiation of pain
   b) Spiritual aspects of life
   c) Psychosocial aspects of life
   d) All of the above
   e) None of the above
3. Which of the following is true about pain
   a) The same patient has pain in more than one site
   b) Is it important to re-assess pain periodically?
   c) Some pain is physiologically necessary
   d) All of the above
   e) None of the above
4. Which of the following is not true concerning pain assessment
   a) New born infants do not have pain
   b) The frail elderly is always expected to have some form of pain
   c) The level of pain is often exaggerated by the patient
   d) All of the above
   e) None of the above
5. One of the following is true about pain rating scales
   a) Pain rating of greater than 3 on the numeric scale usually interferes with daily activity
   b) Verbal rating scale using patient description is least useful technique
   c) Face pain scale is probably the best technique to rate pain among adults
   d) All of the above
   e) None of the above

III-PAIN MANAGEMENT
1. Which of the following is true about grading pain in a patient?
   a) If the patient says pain is severe then it is always severe
   b) The grading of pain cannot be verified objectively with instruments
   c) Using scales is helpful for management decision as well as monitoring response to treatment
   d) All of the above
   e) None of the above
2. What is the best way to administer analgesia for chronic pain?
   a) using oral analgesics whenever pain comes(PRN basis)
   b) using injectable analgesics round the clock
   c) Using oral analgesics round the clock
   d) All are recommended approaches
e) None are recommended approaches

3. Which illustrates the WHO three-step analgesic ladder or approach?
   a) Acetaminophen → Codeine → Morphine
   b) Codein → Acetaminophen → Morphine
   c) Tramadol → Codein → Morphine
   d) All of the above
   e) None of the above

4. Is it important to re-assess pain periodically?
   a) In order to decrease the dose of analgesia and shift to higher level on the analgesic ladder
   b) In order to increase the dose of analgesia and shift to a lower level on analgesic ladder
   c) In order to assess the response to treatment so that to shift up or down analgesic ladder
   d) All
   e) None

5. Which drugs are included in step 1 of analgesic ladder?
   a) Tramadol, Ibuprofen, Diclofenac
   b) Acetaminophen, Diclofenac, Aspirin
   c) Indocid, Codeine, Ibuprofen
   d) All
   e) None

6. What is the correct combination of maximum dose and frequency of administration of paracetamol in 24 hours?
   a) 1000 milligram every six hours
   b) 2000 milligram every six hourly
   c) 3000 milligram every eight hourly
   d) 4000 milligram every twelve hourly
   e) 500 milligram every four hours

7. Which drugs are included in step 2 of analgesic ladder?
   a) Tramadol and Codeine phosphate
   b) Codeine phosphate and Gabapentin
   c) Codeine and Pethidine
   d) Tamadol and pethedine
   e) Oxycodein and Gabapentin

8. What is the correct combination of maximum dose in 24 hours and frequency of administration of codeine phosphate?
   a) Sixty milligram every four hours
   b) Sixty milligrams every 8 hours
   c) Sixty milligram every 12 hours
   d) Eighty milligram every 12 hours
   e) Thirty milligram every four hours

9. Which drugs are included in step 3 of analgesic ladder?
   a) Tramadol and Morphine
b) Codeine phosphate and Gabapentin

c) Morphine and Codeine

d) Tramadol and pethedine

e) Oxycodone and Morphine

10. Which of the following drugs are considered to be adjuvants to the analgesics?
   a) Amitriptyline and carbamezepine
   b) Codeine phosphate and Gabapentin
   c) Morphine and Phenytoin
   d) Tramadol and Gabapentin
   e) Oxycodone and Morphine
IV- PAIN MANAGEMENT-MORPHINE

1. Which of the following is true about morphine
   a. Morphine is safe to use for controlling severe pain
   b. There is no ceiling dose when using morphine
   c. Morphine is started right away for all patients with severe chronic pain
   d. All of the above
   a. None of the above

2. What is the starting dose of morphine?
   a. If the patient is previously using a maximum dose of codeine start with 10 mg morphine every four hours
   b. If the patient is previously using weak opioid start with 20 mg every 4 hours
   c. Start with 40mg irrespective of previous analgesics
   d. Start with 100mg irrespective of previous analgesics
   e. None of the above

3. What should you do if pain persists after the initial dose of Morphine?
   a. Increase the dose by 50%
   b. Add second level drugs
   c. Add adjuvant.
   d. Add first level drugs
   e. None of the above

4. Which is true about adverse effects of Morphine?
   a. Constipation is not tolerated and all patients require laxatives with morphine
   b. Nausea and vomiting are not tolerated and need continuous Plasil administration
   c. Myoclonus and sedation are tolerated in few days and need only close observation
   d. All of the above
   e. None of the above

5. Which of the following is true about Morphine and its use?
   a. Addiction with oral morphine given for severe pain is very common
   b. Using slow release morphine is recommended for break through pains
   c. Rotation to alternative opioids such as ephedrine is recommended in case of development of tolerance with long term use of morphine
   d. Ten milligrams of oral morphine is equivalent to 20 mg of its parenteral dose
   e. Addiction is more common while using parenteral morphine in patient without severe pain.

6. Is morphine safe to use for controlling severe pain?
   a. Yes
   b. No
   c. Don’t know

7. Is Morphine intolerance very frequent?
   a. Yes
   b. No
c. Don’t know
8. Would you start morphine right away for all patients with pain?
   a. yes
   b. no
   c. don’t know
9. What other drugs would you try before giving morphine?
   a. steroids
   b. anti-inflammatory drugs
   c. ART
   d. All
   e. None of the above
10. Can you go from step 1 drugs to oral morphine in the same day?
    a. yes
    b. no
    c. don’t know
11. In which form does morphine usually come?
    a. Injection,
    b. Suppository
    c. Syrup
    d. tablets
    e. Not sure
12. What is the best way to administer morphine?
    a. Injection
    b. Suppository
    c. Oral
    d. Don’t know
13. What is the usual starting dose of morphine in opioid naive?
    a. 2.5mg
    b. 5 mg
    c. 10 mg
    d. 40mg
    e. 100mg
14. Does morphine have a fixed dosing schedule?
    a. Yes
    b. No
    c. Don’t know
15. Is there an upper limit for the dose that controls pain?
    a. Yes
    b. No
    c. Don’t know
16. What should you do if pain persists after the initial dose of Morphine?
    a. Increase dose by 50-100%
    b. Add codeine
c. Increase dose by 30-50%
d. Increase by 5mg-10mg

17. How frequent are nausea and vomiting due to morphine?
   a. Frequent
   b. Very frequent
   c. Seldom
   d. Don’t know

18. When drowsiness does usually appear and how long does it usually last?
   a. 12 hrs and lasts several weeks
   b. 8 hrs and lasts several days
   c. Minutes and last for 48 hrs
   d. Don’t know

19. Is respiratory depression frequent with morphine?
   a. Yes
   b. No
   c. Don’t know

20. How would you treat nausea and vomiting caused by morphine?
   a. Haloperidol and metochlorpromide
   b. Hydrocortisone
   c. Anti-inflammatory
   d. Amytryptiline

21. Is there a difference between psychological dependence, addiction and physical dependence?
   a. Yes
   b. No
   c. don’t know
3-Daily evaluation form

Date  ______________________

1. How valuable were today’s sessions for you, based on a scale of 1 to 5?
   (1 = not valuable at all; 5 = extremely valuable) circle one
   1 2 3 4 5

2. Identify 3 things from today that will be useful to you in your job.
   1. __________________________________________________________
   2. __________________________________________________________
   3. __________________________________________________________

4. Please provide any comments or recommendations regarding the content of today’s training.
   • __________________________________________________________
   • __________________________________________________________
   • __________________________________________________________

5. Please feel free to write any additional comments here.
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
4-Final course evaluation by participants

1. Rate your overall impression of the training: tick one box
   - Excellent
   - Good
   - Fair
   - Poor

2. What was the most useful session of the training?
   ____________________________________________________________

3. What was the least effective session of the training?
   ____________________________________________________________

4. Which topic, activity or exercise did you find the most helpful, and why?
   ____________________________________________________________
   Why?
   ____________________________________________________________

5. Which topic, activity or exercise did you like the least, and why?
   ____________________________________________________________
   Why?
   ____________________________________________________________

6. Which, if any, of the topics, activities or exercises will you apply in your own work, and why?
   ____________________________________________________________
   Why?
   ____________________________________________________________

7. How could this training be improved?
   - __________________________________________________________
   - __________________________________________________________
   - __________________________________________________________
   - __________________________________________________________

8. Rate your overall impression of the presenters on the following criteria: (Tick one number in each row).

<table>
<thead>
<tr>
<th>Presenters</th>
<th>Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Excellent</th>
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<td>Knowledge of materials</td>
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<td>Preparedness</td>
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<td>Communication skills</td>
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<td>Attentiveness</td>
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<td>Comfort level with the training materials</td>
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<td>Ability to engage participants</td>
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9. Please feel free to give additional comments or suggestion

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Training reporting format

Pain management training
- Date of the training: ___________________________
- Venue: ________________________________________
- Organizer: ______________________________________
- Collaborator organization: ________________________

Objectives:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Trainers:
1. ______________________________________
2. ______________________________________
3. ______________________________________
4. ______________________________________
5. ______________________________________

Training Process:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Topics Covered:
1. ______________________________________
2. ______________________________________
3. ______________________________________
4. ______________________________________
5. ______________________________________
6. ______________________________________
7. ______________________________________
8. ______________________________________
9. ______________________________________
10. ______________________________________
Pre and post test results:

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of training sponsor</th>
<th>Organization</th>
<th>Pre-test</th>
<th>Post-test</th>
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</table>

Summary of pre and post test results:

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Summary of overall evaluation of course by trainees:

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Issues that arose during the training:
1. 
2. 
3. 
4. 

Key Challenges
1. 
2. 
3. 
4. 

128
Recommendations:

1. 
2. 
3. 
4. 

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Original, translated into English:
I swear by Apollo, the healer, Asclepius, Hygieia, and Panacea, and I take to witness all the gods, all the goddesses, to keep according to my ability and my judgment, the following Oath and agreement:

To consider dear to me, as my parents, him who taught me this art; to live in common with him, and, if necessary, to share my goods with him; to look upon his children as my own brothers, to teach them this art.

I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.

I will not give a lethal drug to anyone if I am asked, nor will I advise such a plan; and similarly I will not give a woman a pessary to cause an abortion.

But I will preserve the purity of my life and my arts.

I will not cut for stone, even for patients in whom the disease is manifest; I will leave this operation to be performed by practitioners, specialists in this art.

In every house where I come, I will enter only for the good of my patients, keeping myself far from all intentional ill-doing and all seduction and especially from the pleasures of love with women or with men, be they free or slaves.
All that may come to my knowledge in the exercise of my profession or in daily commerce with men, which ought not to be spread abroad, I will keep secret and will never reveal.

If I keep this oath faithfully, may I enjoy my life and practice my art, respected by all men and in all times; but if I swerve from it or violate it, may the reverse be my lot.