PRACTICAL PAIN MANAGEMENT

To start with…

- This is based upon various sources of information in the publications below and the way they have helped me to approach this subject. So for more information consult the following:
  - Oxford Handbook of Palliative Care 2nd Ed: *M Watson et al:* Oxford University Press publications
  - Symptom Management in Advanced Cancer 4th Ed: *R Tywcross et al:* PalliativeDrugs.com publications
  - Palliative Care Formulary 4th Ed: *R Twycross et al:* PalliativeDrugs.com publications
  - Drugs in Palliative Care 2nd: *Andrew Dickman:* Oxford University Press publications

INTRODUCTION *"Think Holistically"* (see Figs 1-4)

- Remember - two important principles of palliative care are that <u>all care</u> should be:
  - **PATIENT-CENTRED** – *putting patients & their significant others at the centre of healthcare*
  - **HOLISTIC** – *a healthcare approach where considering all aspects relevant to a person's care*
    [ie making up 'the whole' person] *is more beneficial to the person than just focusing one of the aspects* [eg. those most familiar to a healthcare worker of a particular discipline – ie doctors can focus on physical aspects alone]
    NB: This approach is not unique to palliative care and is seen in other disciplines eg. general practice
- Palliative care is holistic in the broadest extent:
  - **The Patient**: holistic by considering the *physical, psychological, spiritual & social* aspects relevant to the person (fig.1) which also means considering 'The Triangle of Significant Others' – *family, carers & significant others* (fig.2)
  - **The Team**: holistic in palliative care because of the *<u>fully</u> multidisciplinary team approach*
- It may be helpful to understand the extent of this holistic assessment by considering the following diagrams:
  - Fig. 1 (*a model for an holistic assessment*) is a useful *aide memoir* for different things in palliative care including the approach to symptom control (*eg. 'total pain'*) and it can also represent the model for the assessment that an individual healthcare worker (*eg FY doctor*) has to do for a patient
  - In palliative care, the roles of the healthcare workers tend to fit into one of three groups: a) *Symptom Control*, b) *Disease Managemen*t (*including life saving treatments*) and c) *Psycho-Social-Spiritual Care*
  - The term *multi-disciplinary* alone can mean the involvement of persons from several disciplines in the delivery of patient care using a discipline-oriented approach, where each team member is responsible only for the activities related to their own discipline. Here, one team member may be affected very little by the efforts of the other members (fig.3) and although this can be an easy way to deliver care, it may not always be in the patient's best interests.
  - In palliative care, *multi-disciplinary* also incorporates the terms *inter-disciplinary* and *trans-disciplinary* in its approach.
    - *Inter-disciplinary* is a care approach that presupposes interaction amongst disciplines, where not only are individuals from different disciplines working towards a common goal, but the team members have the additional responsibility of the group. This approach requires effective communication amongst the individuals involved in the patient's care and *the team* includes not only the professionals but the patient and their family and significant others as well.
    - *Trans-disciplinary* is an approach based on the premise that one person can perform professional roles by providing patient care under the supervision of the individuals from the other disciplines involved. Here representatives of various disciplines work together in the initial evaluation and care plan, but only one or two members actually provide the care. Regardless of who is providing the care, professionals are still accountable for areas related to their specific discipline and for training the team member who is delivering the care. This approach can be seen within a hospice when different disciplines become involved in care and in a hospice and primary care where family/carers/others are trained up to provide specific kinds of care.
  - So putting this all together and remembering the 'Triangle of Significant Others' represents both:
    - the caring roles these 'Others' provide to a patient AND
    - the needs of these 'Others' that palliative care needs to consider

    then Fig. 4 can be an *aide memoire* for the full multidisciplinary team, the full extent of the holistic assessment of the patient and who the care is directed at (*ie patient & significant others*)

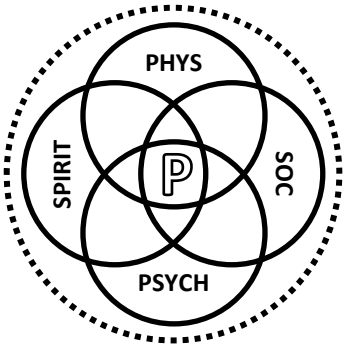


Fig. 1: A model for the Holistic Assessment

Aide memoire for:

- General holistic assessment (*inc. what individual healthcare worker does*)
- Approach to symptom control (*eg Total pain*)

P = The Patient at the Centre (*"Patient Centred"*)

PHYS = The Physical Aspects
- Things of The Body – *eg. performance status, co-morbidities, diseases, their treatments etc*

SOC = The Social Aspects
- Things of The Society – *eg. the cultural, living, working, social environments & support structures, etc*

PSYCH = The Pychological Aspects
- Things of The Mind – *eg. "ICE" – (realistic & unrealistic): IDEAS (& undersanding); CONCERNS, (& worries, fears); EXPECTATIONS; mental health, ICE about PHYS/SOC/SPIRIT aspects etc*

SPIRIT = The Spiritual Aspects
- Things of The Spirit – *eg. HOPE assessment, religious beliefs, existential thinking eg "why me?", "What is the purpose?" etc*

Eg.Pain is modulated by the patient's

Mood / Morale / Meaning the pain has to patient

NB: The 4 elements above often merge to a greater/lesser extent *eg.*

"My cancer has made me physically dependant!" (PHYS)

"My spouse cannot care for me at home; I need a nursing home; my spouse, family & friends will have to travel to see me!; I'll need to change church!" (*SOC*)

"I can't get to church, who will give me communion?; I need prayers for the sick; I can't do what I should do in church!; Where is God?; Why has He done this o me?; What did I do wrong? Did I deserve this?" (*SPIRIT*)

"I'm anxious/worried/fearul about the above!"(*PSYCH*)

Fig. 2: The Triangle of Significant Others

Aide memoire for:

- Who else is important in the patient's life
- The non-healthcare worker(s) who is/are caring for / supporting the patient
- The non-healthcare worker(s) who is/are not in the role above but are important to patient

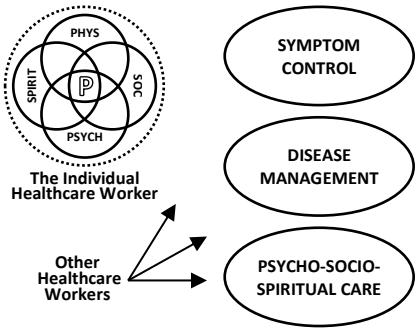


Fig. 3: A Multidisciplinary Team model

A reminder for how:

- A team may be '*multidisciplinary*' but the members work in isolation of each other (*individually +/or in a discipline*) possibly to the detriment of the care of the patient

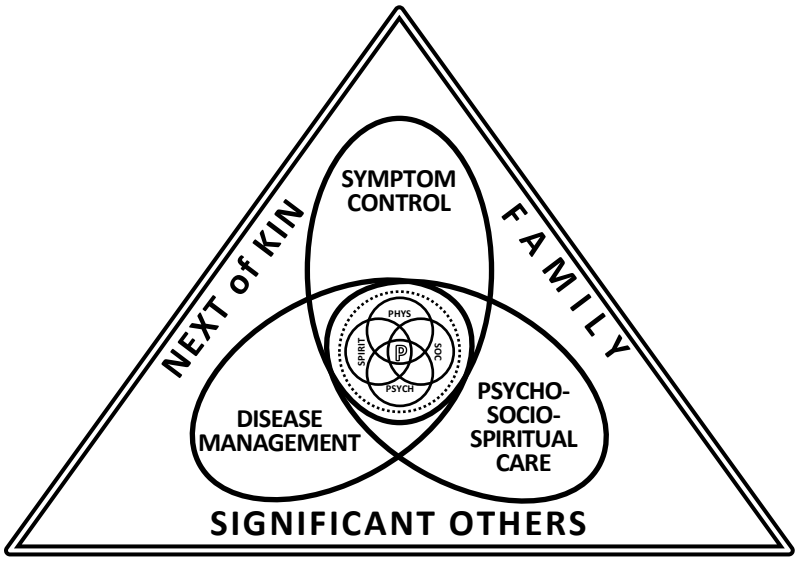


Fig. 4: The full Palliative Care Multidiciplinary Team

Aide memoire for:

- The composition of the paliative team (*fully multidisciplinary*)
- The full extent of the holistic assessment
- The focus palliative care

PRACTICAL DEFINITIONS OF PAIN

1. ***"Pain is what the patient says it is."***
   - This is a summary of the other two below but is too brief for those unfamiliar with what pain is

2. ***"Pain is an unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage". World Health Organisation* definition**
   - It is always *unpleasant*
   - It is an *experience* (*ie sum of lots of things eg sensory information, comprehension, emotional feelings, memories etc*)
   - It is partly *sensory – ie activation of the sensory nervous system*
   - It is partly *emotional – ie how the brain interprets/makes sense of/ gives a meaning to the sensory stimulus, memories of past experiences etc*
   - Occurs with *actual tissue damage – ie occurs with pathological causes*
   - Occurs with *potential tissue damage – ie occurs with pathological causes before tissue is damaged (eg heat) OR occurs when the brain 'thinks' there is possible damage in the absence of pathology (eg somatization in mental health disease)*
   - "Or is *described in such terms*" *– eg how the patient relays/describes the pain (ie in non-medical jargon)*

3. ***"Total Pain." – see Fig 1***
   - Pain has 4 dimensions, and is modulated by the patient's MOOD, MORALE & the MEANING the pain has

PHYSICAL	SOCIAL	PSCHOLOGICAL	SPIRITUAL
• Presence of other unpleasant symptoms • Side effects of treatments • Insomnia • fatigue	• worry about finances • worry about family • worry about coping at home • loss of role in family • loss of job & income • loss of social position • feeling isolated • feeling abandoned	• fear of pain • fear of death & dying • change in body image & disfigurement • feeling helpless • anger: diagnostic delays, therapeutic failure	• why has this happened to me? • Why has God allowed this to happen to me? • What is the meaning or purpose? • What is the point of things? • What did I do wrong? • Will I be forgiven?

   - It is important to take the SOC/PSYCH/SPIRIT aspects into account as well as the PHYS for pain to be managed fully

PRACTICAL CLASSIFICATIONS OF PAIN

1. Classification according to Time Course

- Here pain is classified as either ACUTE or CHRONIC according to how long it has lasted

	ACUTE PAIN	CHRONIC PAIN
Time Course:	• Transient	• Persistent
Meaning:	• Positive (*warning of harm or illness*)	• Negative: serves no purpose • Positive: person gets secondary gain
Associated features: *"Concomitants"*	• *"Fight or Flight"* — Fast heart — Sweating — Dilated pupils — Rapid breathing — Viscera to muscle shunting of blood	• *"Vegetative"* — Loss of sleep — Loss of appetite — Loss of energy — Loss of libido — Loss of pleasure in life — Constipation — Pre-occupation with bodily symptoms — Personality change
Management:	• Physical therapies are often used for short time because resolution is expected	• Physical therapies alone are often enough • Pain may not be completely resolved • Behavioural and psychological therapies are often needed to help the person adapt to living with the pain and cope better

- Features of Chronic Pain can indicate that drug therapies may not be as successful as people usually expect (a "cure" is often wanted –"*give me something to take the pain away, doctor*!") compared with strategies etc that help a patient manage and cope with pain. This can be difficult for a person to come to terms with and medications may be seen to be such an answer. Sensitively pointing this out early on (if a person will let you) and consistently thereafter, whilst employing a multi-modal (re drugs - if effective - and strategies from other disciplines etc) can be important. More information for health professionals and patients on this and other aspects of pain management can be found on the British Pain Society (BPS) website:
  - GENERAL ACCESS: http://www.britishpainsociety.org/
  - TOPIC SPECIFIC: BPS now has approved 'pain pathways' on Map-of-Medicine accessible to all
    Pain Patient Pathways Microsite: http://bps.mapofmedicine.com/evidence/bps/index.html

- The following two classifications are useful in trying to identify the CAUSE & MECHANISM of the pain which can aid the selection of treatments

2. Classification according to Cause

- Here pain is classified according to the following general causes:

CANCER	NON-CANCER		
• Effects of the malignancy	• Effects of the cancer treatment	• Debility	• co-morbidities

3. Classification according to Mechanism

- Here pain is classified according to whether it is NOCICEPTIVE or NEUROPATHIC, PHYSIOLOGICAL or PATHOLOGICAL, VISCERAL or SOMATIC – *see below*
- Here pain is classified according to the following mechanisms:

NOCICEPTIVE				NEUROPATHIC			
PHYSIOLOGICAL (*Functional*)		PATHOLOGICAL (*Organic*)		PHYSIOLOGICAL (*Functional*)		PATHOLOGICAL (*Organic*)	
Somatic	Visceral	Somatic	Visceral	Central		Peripheral	
• Tension headache • Myofascial pain & other cramps	• Migraine • colic	• Cancer • Infection • Trauma • arthritis	• Cancer • Infection • trauma	• Eg. temporary nerve compression • Spinal cord compression • Post stroke pain			
				Somatic		Visceral	
				• Phantom limb pain • Post herpetic neuralgia • Peripheral neuropathy		• Malignant infiltration of visceral nerves	

- Nociceptive/neuropathic, somatic/visceral pathological sources of pain have particular pain descriptors and certain groups of drugs are used to treat each (*see additional hand-outs*)

A PRACTICAL APPROACH TO PAIN MANAGEMENT

- The following shows one way to approach pain

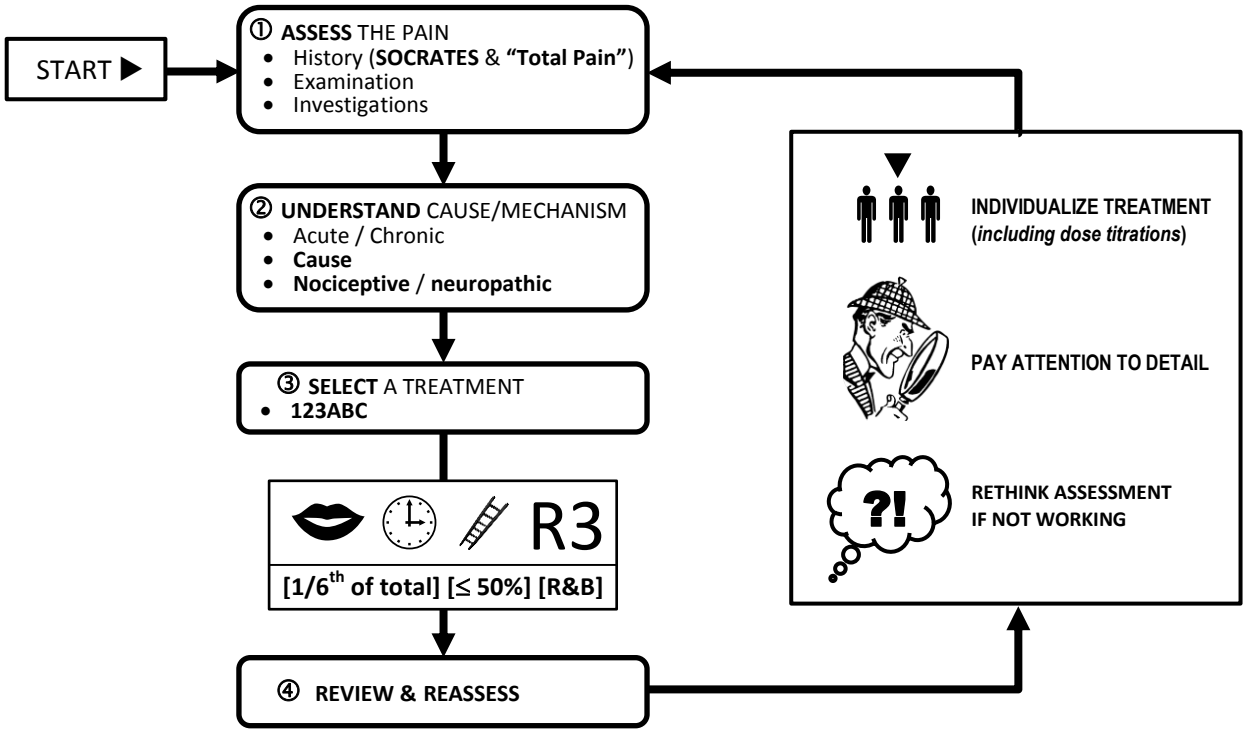


Fig. 4 An approach to managing pain

① ASSESS PAIN

- A SOCRATES assessment is needed for <u>EACH</u> pain (*patients with cancer may have more than one*)

S	**SITE**
O	**ONSET**
C	**CHARACTER**
R	**RADIATION**
A	**ASSOCIATED FACTORS**
T	**TIME**
E	**EXACERBATING / RELIEVING FACTORS**
S	**SEVERITY**

Pain descriptors give clues to cause of & underlying mechanism behind pain

More clues about cause /mechanism of pain PLUS effects of therapy already tried

Allows you to select a treatment (123ABC) & assess its effects for an individual

- A *"Total Pain"* assessment is needed for to identify those factors that will not respond to drugs alone
- Examination & Investigations are also needed to support/investigate possible causes to select the best management plan – *in which drugs may only play one part*

② WORK OUT CAUSE & MECHANISM FOR EACH PAIN

- Use information from ① to achieve this
- Different *causes* may require solutions from other disciplines (*eg. radio/chemo therapy, surgery etc*)
- Different types of pain (*mechanisms*) respond to different groups of medications (eg. *bone pain: opioids + NSAIDs – see other handouts*)
- Other *preventative drugs* may be needed depending on treatment selected (*eg laxatives with opioids*)
- Other *co-factors* may also need to be addressed (*eg.other physical & social, psychological, spiritual factors*)

③ SELECT A TREATMENT: 123ABC – see Fig 5

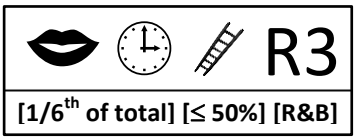
THINK THROUGH EACH COMPONENT

- 123 = WHO Analgesic Ladder
- A = Adjuvants & Anti-inflammatories for pain
- B = "Bowels" – preventatives
- C = Co-factors – for pain management

④ REVIEW & RE-ASSESS

- Individualise treatment by regularly reviewing and adjusting doses (*see below*)
- Pay attention to detail of the case
- If pain is not improving, re-assess (*assess, understand, select, review*)
- A = Adjuvants & Anti-inflammatories for pain
- B = "Bowels" – preventatives
- C = Co-factors – for pain management

☺ THE OPIOID RHYME (*my aide memoire – use if it helps*)



The Opioid Rhyme

"By the mouth, by the clock, by the Ladder, R3
One sixth of Total, Up to 50, R & B"

TOP LINE IS FROM WHO PAIN LADDER

- *BY THE MOUTH:* unless there is a clinical need, give medication by mouth
- *BY THE CLOCK:* give analgesia regularly – do not wait for patient to be in pain
- *BY THE LADDER:* use WHO Pain ladder as a guide to giving opioid/non-opioid analgesia
- *R3:* *review, review, review* – regularly review patient to individualise treatment

BOTTOM LINE GIVE YOU OPIOID PRESCRIBING GUIDANCE

- *ONE 6TH OF TOTAL:* tells you how to calculate breakthrough dose (*ie breakthrough is 1/6th of total daily opioid dose*)
  eg. morphine IR PO 60mg/24h: breakthrough is 60/6 = 10mg PO 1H PRN
- *UP TO 50* tells you % maximum a regular opioid dose may be increased – *ie up to max of 50%*
  eg. morphine MR 30mg PO 12H = 60mg/24H PO so increase may be no more than 30mg *ie to 90mg/24H PO*
- *R&B:* reminds you to always prescribe opioid in TWO parts:
  Regular dose PLUS **B**reakthrough dose (1/6th of R)

Figure 5 123ABC

	1	2	3
Pain severity ▶	**mild**	**moderate**	**severe**
Non-Opioid • Paracetamol (max 4g/24h) • [NSAIDs/COX2s] – a) Weak Opioid • Codeine (max 240mg/24h) – b) ≅ 24mg Morphine PO • Dihydrocodeine (max 240mg/24h) ≅ 24mg Morphine PO • Tramadol (max 400mg/24h) – b), c) ≅ 40mg Morphine PO a) Use selectively (*see A*) b) Metabolised by CYP2D6 to active metabolite. 10% Caucasians are CYP2D6 poor metabolisers reducing opioid effect (*try dihydrocodeine*) c) Has other effects including serotonergic & noradrenaline reuptake inhibition (*can help with neuropathic pain*)	**Step 1** **Non-Opioid** when dose maximised MOVE UP	**Step 2** **Non-Opioid** (dose maximised) **+** **Weak Opioid** when dose maximised MOVE UP	**Step 3** **Non-Opioid** (dose maximised**)** **+** **Strong Opioid** • Morphine (*Gold Standard*) • diamorphine — **USE IN RENAL IMPAIRMENT: AVOID** • Oxycodone — **CAN USE BUT 10% renal elimination so can accumulate** • Buprenorphine • Fentanyl • Alfentanil — **SAFE**

A — ADJUVANTS & ANTI-INFLAMMATORIES

- **ADJUVANTS** are drugs that are not technically analgesics and are used for other reasons but may relieve pain resistant to conventional analgesics (eg.NSAIDs & opioids) including:
  - CORTICOSTEROIDS
  - ANTI-DEPRESSANTS
  - ANTI-CONVULSANTS
  - NMDA-RECEPTOR CHANNEL BLOCKERS
  - SMOOTH MUSCLE RELAXANTS (ANTI-SPASMODICS)
  - SKELETAL MUSCLE RELAXANTS
  - BISPHOSPHONATES
- **ANTI-INFLAMMATORIES** include the non-selective NON-STEROIDAL ANTI-INFLAMMATORIES (NSAIDs) and the selective COX-2 INHIBITORS

B — "BOWELS"

- **PREVENTATIVE DRUGS** including:
  - LAXATIVES – regularly with opioids
  - ANTI-EMETICS – PRN for opioids
  - GASTRO-PROTECTION (*eg PPI, misoprostol, H2 antagonists*) – NSAIDs/COX-2s/steroids

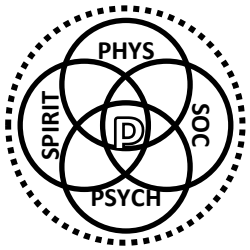
C — "CO-FACTORS"

- **REVISIT HOLISTIC "TOTAL PAIN" MODEL** including:

PHYSICAL factors:

☑ NON-DRUG METHODS:
- massage
- TENS
- heat / cold
- walking aids/ wheelchairs
- immobilisation (*splints /slings / corsets*)
- hoists
- mattresses
- dressings

☑ SURGERY
☑ CHEMOTHERAPY
☑ RADIOTHERAPY
☑ HORMONE THERAPY
☑ REGIONAL ANAESTHESIA



PSYCHOLOGICAL/SOCIAL/SPIRITUAL factors:
Including
☑ *explanation, addressing ideas, concerns (fears), expectations*
☑ *psychological therapies – counselling, CBT etc*
☑ *relaxation & distraction (including complementary therapies, art, music etc therapies)*