IN THE NAME OF GOD

PAIN ASSESSMENT IN PALLIATIVE CARE

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Theories of pain

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

International Association for the Study of Pain

Definition of pain

- Pain is a complex phenomenon and an important clinical problem.
- The unidimensional approach to pain implied that pain has a predominantly physical basis and is treatable by analgesics.
- It is now recognized that pain perception is governed by a multitude of factors— the neuromatrix theory of pain).

Cicely Saunders

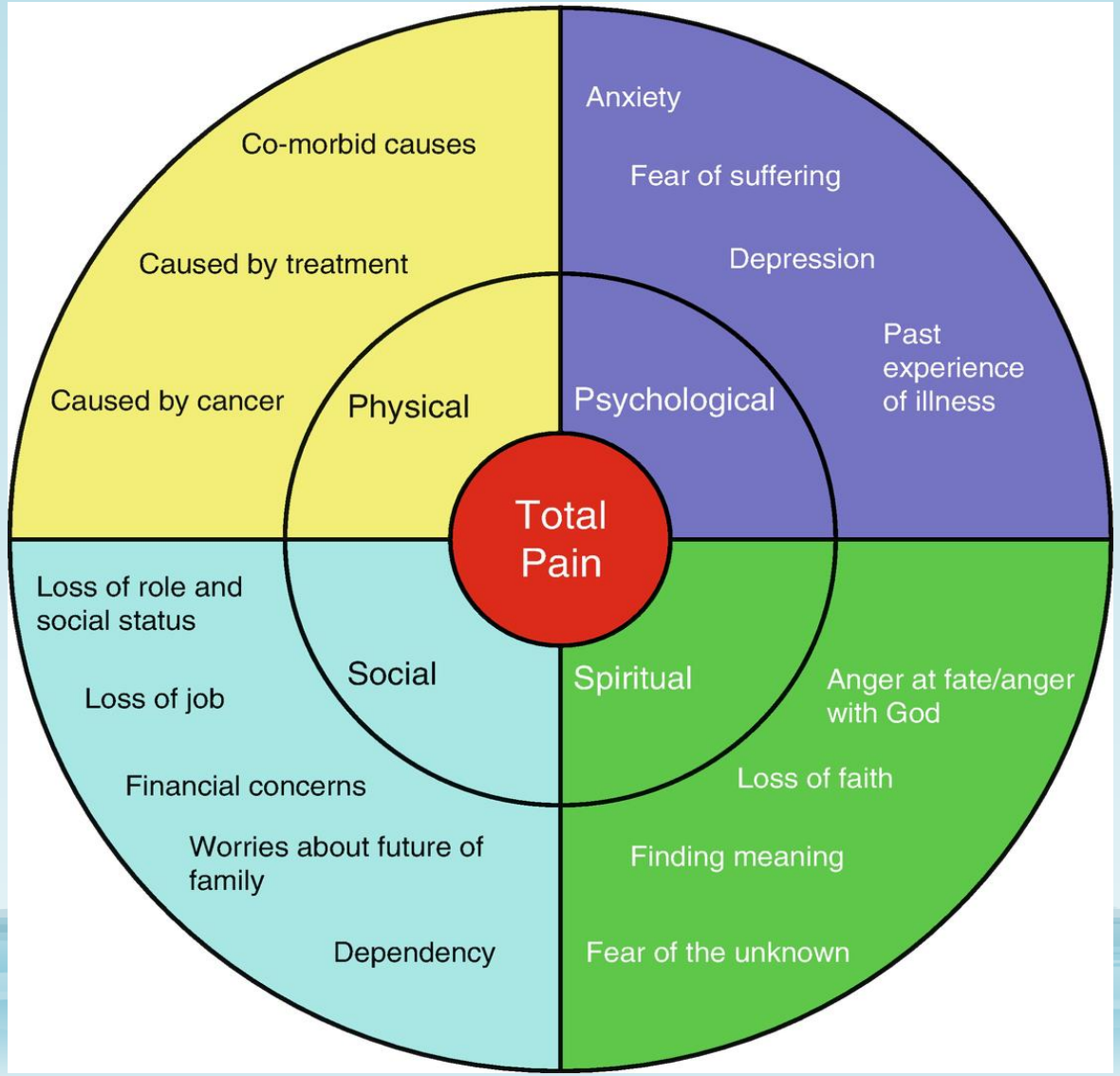
I think the simplest and probably the best definition of pain is what the patient says hurts. I think that they may be expressing a very multi-faceted thing. They may have physical, psychological, family, social and spiritual things all wound up in this one whole experience. But I think we should believe people and once you believe somebody you can begin to understand, and perhaps tease out the various elements that are making up the pain.

Total pain

Dame Cicely Saunders recognized that many important factors can influence the pain experience. In parallel with the work of others, she developed the concept of **total pain** from her understanding that the origins of pain may be:

- physical
- social
- psychological
- spiritual

Total pain diagram



Assessment of pain

FAILURE TO ASSESS PAIN IS A CRITICAL BARRIER TO GOOD PAIN MANAGEMENT.

معرفی بیمار

بیمار آقای ۵۶ ساله با کانسر متاستاتیک ریه از ۴ ماه قبل،که بیماری وی به دنبال تنگی نفس، کاهش وزن و خستگی تشخیص داده شده است. با توجه به اینکه قابل جراحی نبوده، تحت شیمی درمانی و رادیوتراپی پالیاتیو برای کنترل علائمی از قبیل درد، تنگی نفس قرار گرفته است.در بررسی ها متاستاز کبدی و درگیری های متعدد استخوانی داشته است. به علت تشدید بی قراری و نوسان سطح هوشیاری به اورژانس مراجعه نموده است. همراهان وی همسر و دو دختر ۱۵ و ۱۸ ساله هستند که بنا به گفته آنان علائم در هفته اخیر بدتر شده است. تحت درمان با اکسی کدون و متادون خوراکی می باشد. بیمار روزانه یک پاکت سیگار مصرف می کند و شغل وی نجاری بوده است که از زمان تشخیص، شغل خود را ازدست داده است. با توجه به اینکه نان آور خانواده بوده است، دچار مشکلات اقتصادی شده است و از تقدیری که خداوند برایش رقم زده شاکی است. در معاینه بی قرار است، مرتبا گریه می کند، به درستی به سوالات پاسخ نمی دهد. مرتبا همسرش را صدا می کند و ترس از مرگ دارد. از درد شدید در ناحیه کمر، سر و قفسه سینه و تنگی نفس شاکی است.

سوال

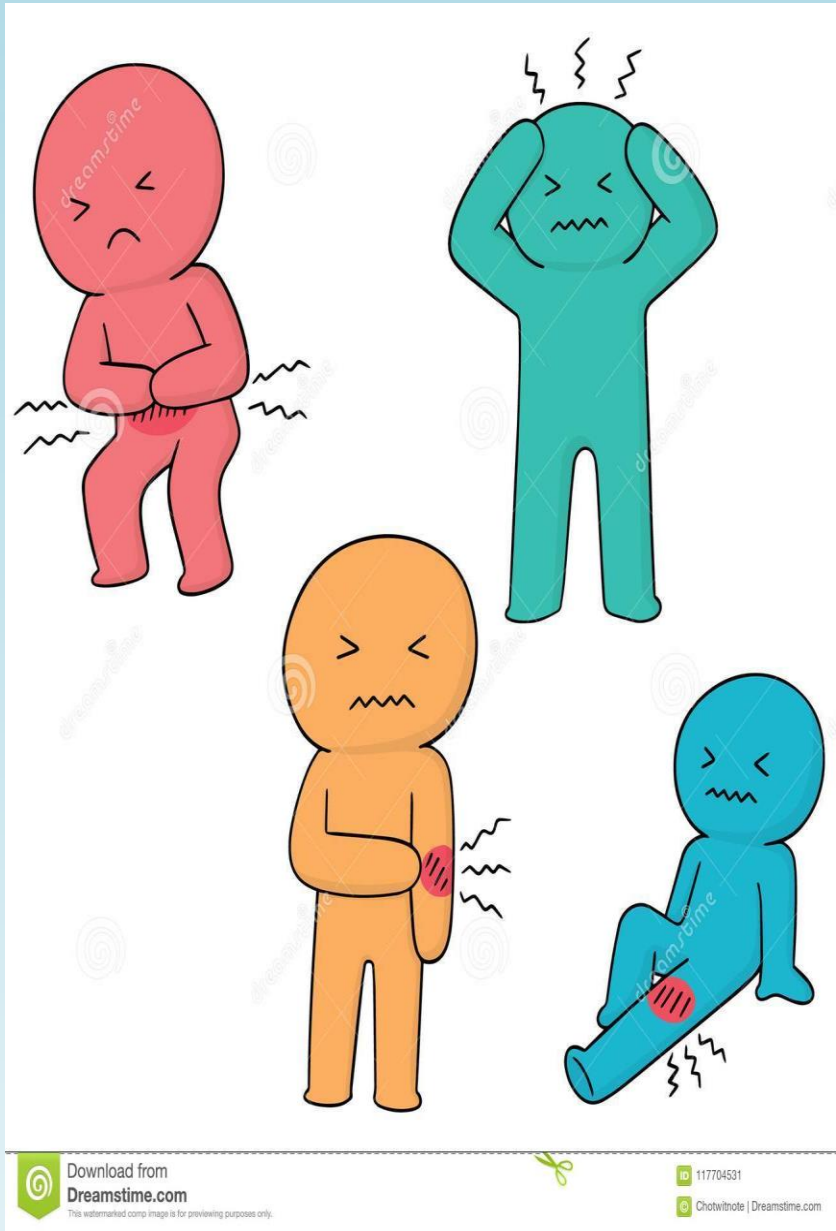
۱.علت تشدید درد بیمار، علیرغم دریافت دو نوع داروی مخدر چیست؟

۲. چگونه باید درد بیمار را ارزیابی و مدیریت کرد؟

KEY POINTS

- Pain is a subjective experience, and so patient self- report is the gold standard of pain assessment.
- Evaluation and treatment of pain are best achieved by a team approach.
- It has been shown that patient education and involvement in the management of their own pain can result in a significant decrease in pain intensity.
- Many patients will have more than one type of pain, and each pain should be assessed separately.
- Patients should be re- assessed at regular intervals following initiation of treatment, and also at each report of new or altered pain.

Principles of pain assessment



Domains of comprehensive assessment

- physical effects and manifestations of the pain
- functional effects of the pain
- psychosocial and spiritual factors influencing the pain
- potential modulators of pain expression including substance use and delirium.

Basic components of a pain assessment

- description of the onset and duration of the pain
- description of the pain, e.g. location, quality, pattern, character
- rating of pain intensity (including a current pain rating, and ratings when pain is worst and least)
- description of aggravating and relieving factors
- description of associated symptoms and signs
- description of the effects of pain on functioning and quality of life
- description of current pain management regimen and assessment of effectiveness
- summary of the past history of pain management
- identification of the patient's goals of treatment
- physical examination
- diagnostic testing, where appropriate

Clinical history of pain

Simple questions

Box 3 Simple pain assessment questions for use with a unidimensional tool

Location	Where is the pain? Does it radiate to any other area?
Intensity	How strong/bad is the pain?
Constant or intermittent	Is it there all the time or does it come and go?
Descriptors	What does it feel like?
Exacerbating factors	What makes it worse?
Relieving factors	What makes it better, including any analgesia previously tried?
Duration	When did the pain begin?
Effect	What effect does the pain have on function such as sleep, activity and wellbeing?

(Adapted from Laverty 2009, Cox 2010)

SOCRATES acronym

Box 9.3.1 SOCRATES acronym for pain assessment

*S*ite
*O*nset
*C*haracter
*R*adiation
*A*ssociated factors
*T*iming
*E*xacerbating/relieving factors
*S*everity.

Character

- Nociceptive pain is divided into somatic pain, which arises from injury to the soft tissues and bone, and visceral pain, which arises from injury to internal organs.
- Somatic pain is usually well localized and described as aching, sharp, or throbbing.
- Visceral pain due to obstruction of a hollow viscus is poorly localized and can be described as gnawing or cramping; injury to deep fascia, or organs such as the heart, may be described as pressure or a deep pain.
- Patients often find visceral pain harder to describe than somatic pain.
- Neuropathic pain is often described as numb or burning with sharp, shooting pains on movement.

Associated features

- inter-individual differences
- advanced medical illness
- incident pain
- younger patients
- psychological distress
- sleep disturbance
- lack of social support
- finances and family support

Severity

- It is important to assess the severity of pain, as the greater its severity the more impact it has on daily functioning and quality of life.
- Various pain measurement tools can be applied to this task

Pain assessment tools

- Pain scales can be useful tools in the systematic assessment of symptoms, during both initial and ongoing assessments.
- These tools encourage patient communication and facilitate the professional's understanding of the patient's experience.
- ideal qualities of a pain assessment tool include:
  - ease of administration
  - validity and reliability
  - sensitivity to treatment effect

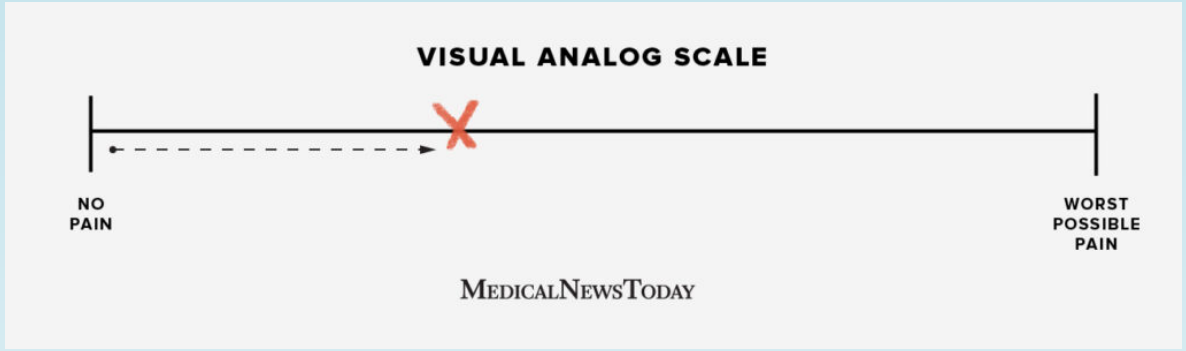
Pain assessment tools

Pain assessment tools may be unidimensional or multidimensional:

- unidimensional tools provide information about the intensity of the pain experienced by the patient, and take the form of visual analogue scales, verbal rating scales, and numeric rating scales

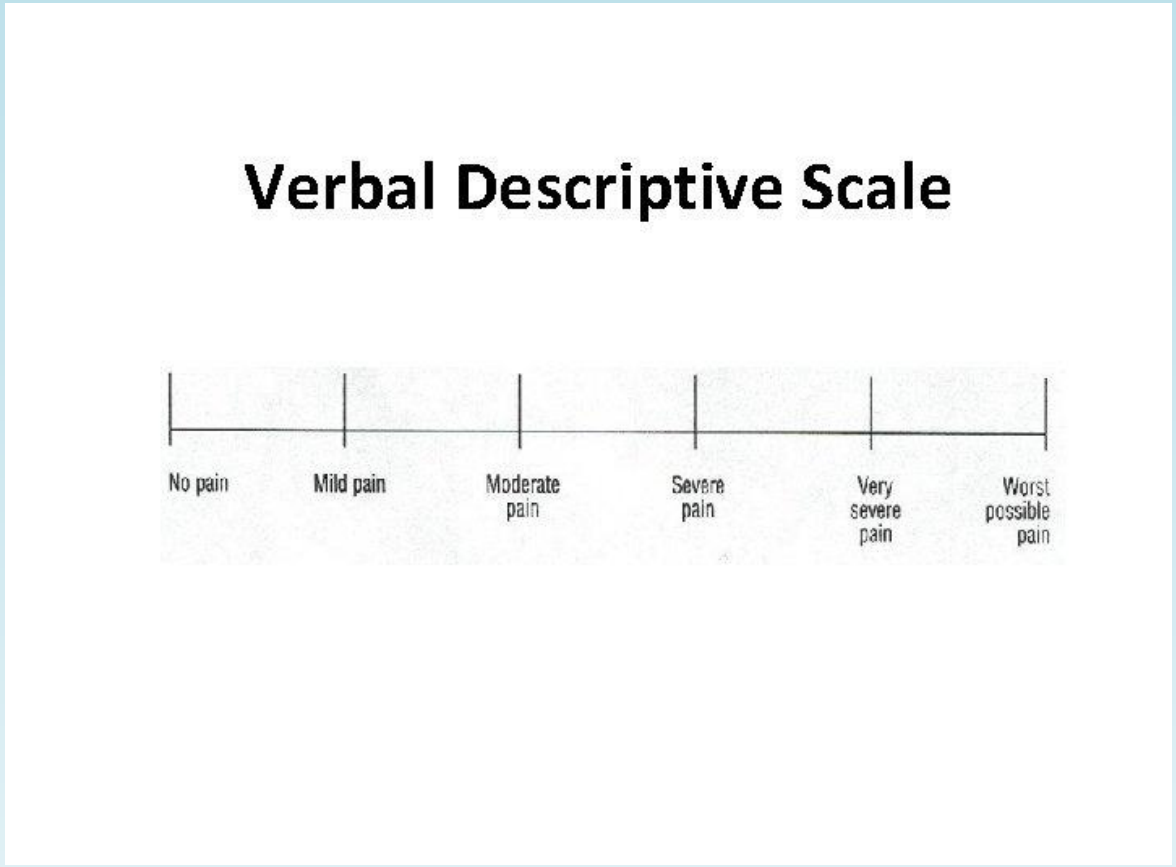
- multidimensional pain measuring tools provide information about additional aspects of the pain such as history, location, affective component, and quality of the pain; examples include the McGill Pain Questionnaire and the Brief Pain Inventory

visual analogue scale (VAS)



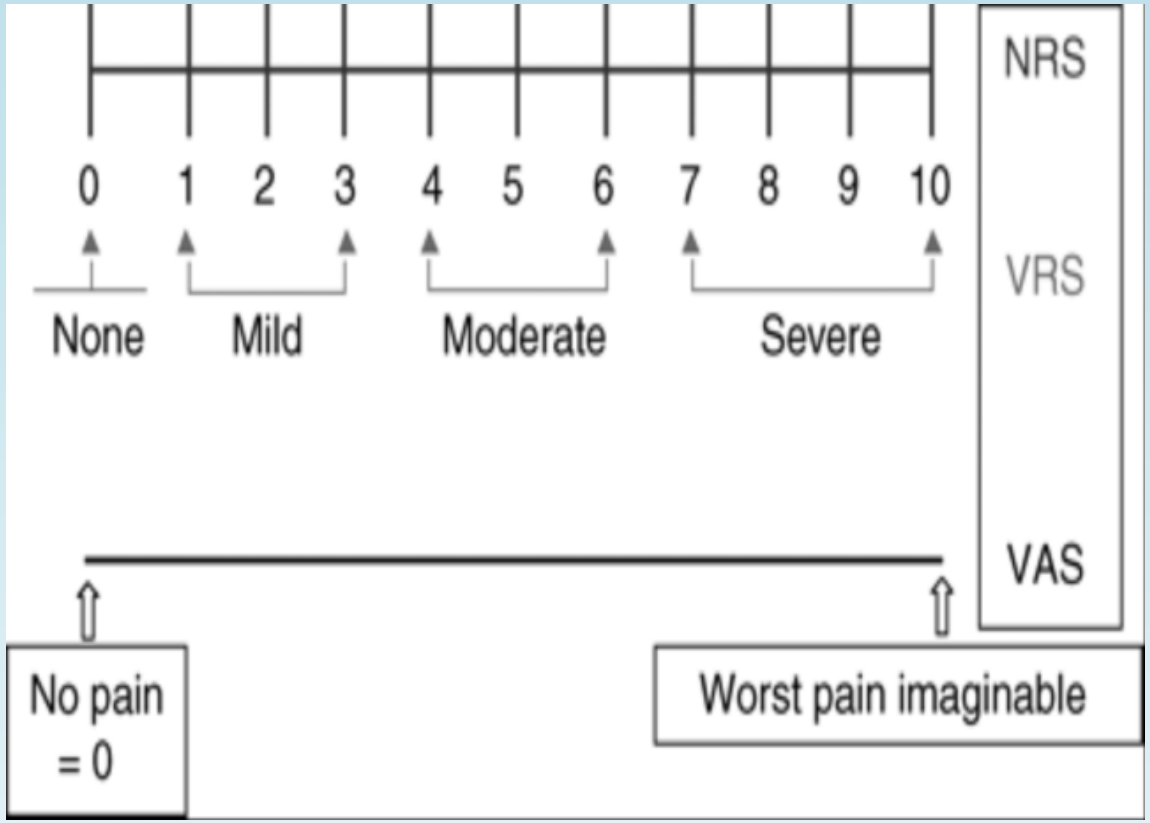
- The VAS is a line with extremes marked as ‘no pain’ and ‘worst pain’.
- Patients are asked to mark the point in the line that best describes their pain.

verbal rating scale (VRS)



- categorical verbal scales provide verbal descriptors, such as none, mild, moderate, or severe.
- OR involves a sequence of words describing different levels of pain intensity

Numerical rating scale (NRS)



- An 11-point numeric scale (e.g. ‘0 to 10, where 0 is no pain and 10 is pain as bad as you can imagine’)

Brief Pain Inventory (BPI)

- has long (15 minutes) and short versions;
- Either a health-care professional or patient can complete it.
- The short version assesses pain severity from four frames of reference—‘pain
- right now’, ‘pain at its best’, ‘pain at its worst’, and ‘pain on average’ and also measures pain relief using a VAS.
- The short form has been recommended for cancer pain assessment.

Brief Pain Inventory

Brief Pain Inventory

Date: /___/

Name:_____ _____ _____

Last First Middle Initial

Phone: (____)_____ Sex: ☐ Female ☐ Male

Date of Birth: /___/

1) Marital Status (at present)

1. ☐ Single 3. ☐ Widowed
2. ☐ Married 4. ☐ Separated/Divorced

2) Education (Circle only the highest grade or degree completed)

Grade 0 1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 M.A./M.S.

Professional degree (please specify)_____

3) Current occupation _____
(specify titles; if you are not working, tell us your previous occupation)

4) Spouse's Occupation _____

5) Which of the following best describes your current job status?

☐ 1. Employed outside the home, full-lime
☐ 2. Employed outside the home, part-time
☐ 3. Homemaker
☐ 4. Retired
☐ 5. Unemployed
☐ 6. Other

5) How long has it been since you first learned your diagnosis? _____months

7) Have you ever had pain due to your present disease?
1. ☐ Yes 2. ☐ No 3. ☐ Uncertain

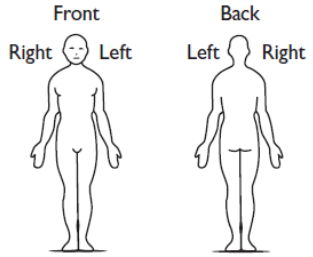
8) When you first received your diagnosis, was pain one ol your symptoms?
1. ☐ Yes 2. ☐ No 3. ☐ Uncertain

9) Have you had surgery in the past month? 1. ☐ Yes 2. ☐ No

10) Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain during lhe last week?
1. ☐ Yes 2. ☐ No

IF YOU ANSWERED YES TO THE LAST QUESTION, PLEASE GO ON TO QUESTION 11 AND FINISH THIS QUESTIONNAIRE IF NO YOU ARE FINISHED WITH THE QUESTIONNAIRE. THANK YOU.

11) On the diagram, shade in the areas where you feel pain. Pul an X on the area that hurts the most



12) Please rate your pain by circling the one number that best describes your pain at its worst in the last week.

01 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

13) Please rate your pain by circling the one number that best describes your pain at its least in lhe last week.

01 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

14) Please rate your pain by circling the one number that best describes your pain on the average

01 2 3 4 5 6 7 8 9 10
No Pain — Pain as bad as you can imagine

McGill Pain Questionnaire

- The McGill Pain Questionnaire (MPQ) is another self-report tool validated in cancer patients.
- It assesses intensity, quality, temporal pattern, relieving and exacerbating factors, and site of pain.

Clinical examination

- Clinical examination is essential to ensure accurate diagnosis of the pathophysiology of pain.
- It allows for assessment of comorbidities and the patient's overall physical state.
- A neurological examination often provides valuable information and is essential if neuropathic pain is suspected.
- Can guide for Confirmatory imaging and may lead to further directed treatment, such as radiotherapy.

Non-verbal Assessing pain

Who Might be Unable to Communicate Pain?

- Post-anaesthetic patients;
- Patients with cognitive impairments such as dementia;
- Patients receiving palliative care;
- Patients receiving end-of-life care;
- Patients with hearing difficulties;
- Intubated patients;
- Sedated or unresponsive patients;
- Patients with aphasia;
- Neurologically compromised patients;
- Patients who have fears, beliefs and misconceptions about their pain;
- Patients who have specific cultural needs;

cognitive impairment and pain

- Pain is under- reported and under- treated in cognitively impaired people.
- Particularly at the end of life, it has been shown that people with dementia often receive suboptimal management of physical and psychological symptoms in comparison to the general population.
- loss of language communication presents a major challenge in assessing pain, as self reporting is required for most pain assessment tools.
- In the absence of verbal self- report, nurses and carers are forced to rely increasingly on non- verbal and behavioural cues of physical and emotional pain.

Non-Verbal Clinical Signs and Symptoms of Pain

Facial expressions

- Rapid blinking,
- fear,
- brow lowering,
- clenched teeth,
- narrowing or closure of eyes,
- upper lip raising,
- nose wrinkling.

Verbalisations

- Screaming,
- crying,
- moaning,
- sighing,
- making fewer sounds than is typical.

Body movements

- Gaiting,
- limping,
- rubbing a body area,
- muscle rigidity,
- decreased movement,
- guarding, rocking,
- fidgeting,
- repetitive movements,
- reluctance to move,
- decreased range of movement.

Interpersonal interactions

- Resisting care
- aggression
- isolation

Mood and mental state

- Delirium,
- depressive state,
- agitation,
- anxiety,
- irritability,
- crying,
- impaired executive function,
- declining cognition,
- worsening of cognitive impairment,
- confusion,
- restlessness.

Activity

- Wandering,
- sleep disturbances,
- increased sleep,
- social disengagement,
- change of routine,
- staying in bed,
- low appetite.

Function

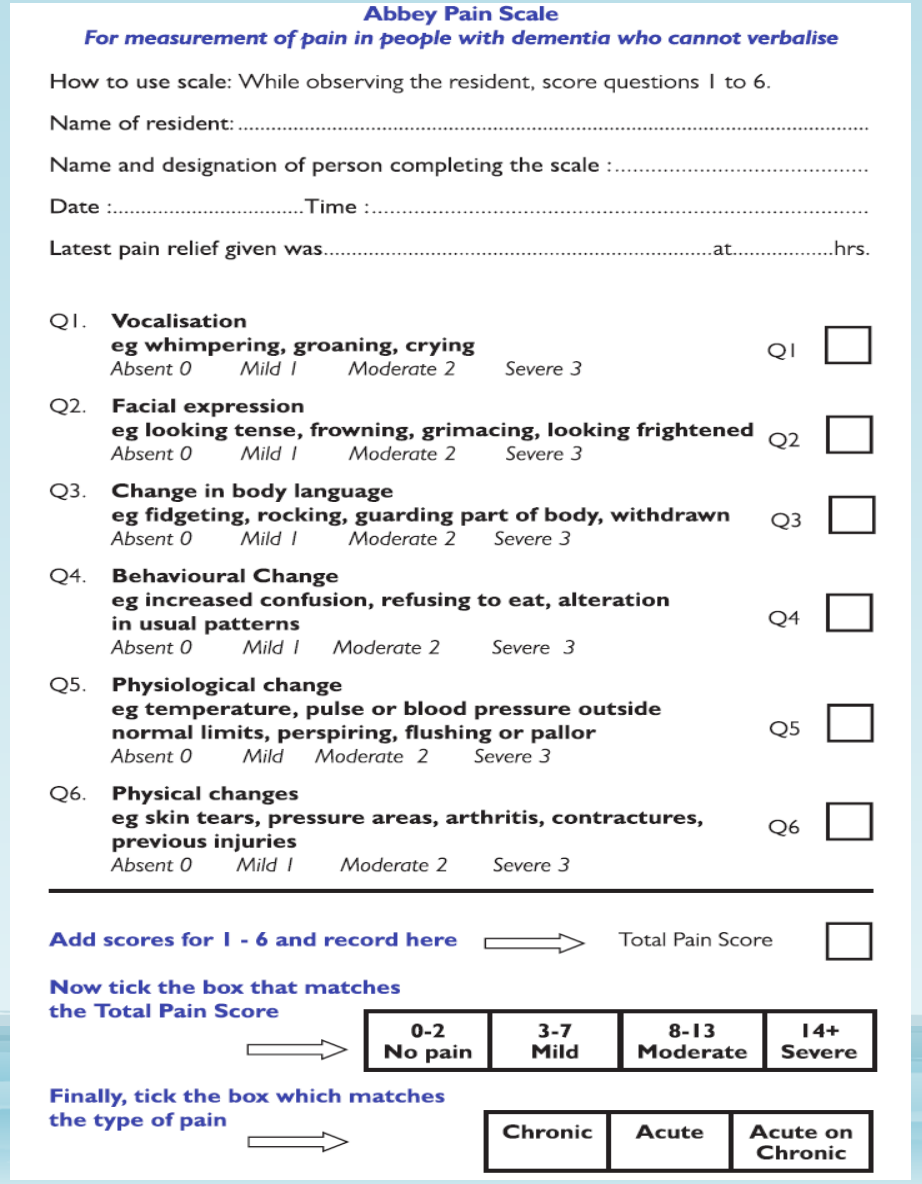
- Decreased ability to function in daily life
- falls

Autonomic signs

- Pallor,
- altered breathing,
- change in vital signs,
- sweating.

Non-Verbal Assessment Tools

Abbey Pain Scale



Abbey Pain Scale

For measurement of pain in people with dementia who cannot verbalise

How to use scale: While observing the resident, score questions 1 to 6.

Name of resident: .....

Name and designation of person completing the scale : .....

Date : .....Time : .....

Latest pain relief given was.....at.....hrs.

Q1. **Vocalisation**
eg whimpering, groaning, crying
Absent 0 Mild 1 Moderate 2 Severe 3 Q1 ☐

Q2. **Facial expression**
eg looking tense, frowning, grimacing, looking frightened
Absent 0 Mild 1 Moderate 2 Severe 3 Q2 ☐

Q3. **Change in body language**
eg fidgeting, rocking, guarding part of body, withdrawn
Absent 0 Mild 1 Moderate 2 Severe 3 Q3 ☐

Q4. **Behavioural Change**
eg increased confusion, refusing to eat, alteration in usual patterns
Absent 0 Mild 1 Moderate 2 Severe 3 Q4 ☐

Q5. **Physiological change**
eg temperature, pulse or blood pressure outside normal limits, perspiring, flushing or pallor
Absent 0 Mild Moderate 2 Severe 3 Q5 ☐

Q6. **Physical changes**
eg skin tears, pressure areas, arthritis, contractures, previous injuries
Absent 0 Mild 1 Moderate 2 Severe 3 Q6 ☐

Add scores for 1 - 6 and record here ⇒ Total Pain Score ☐

Now tick the box that matches the Total Pain Score

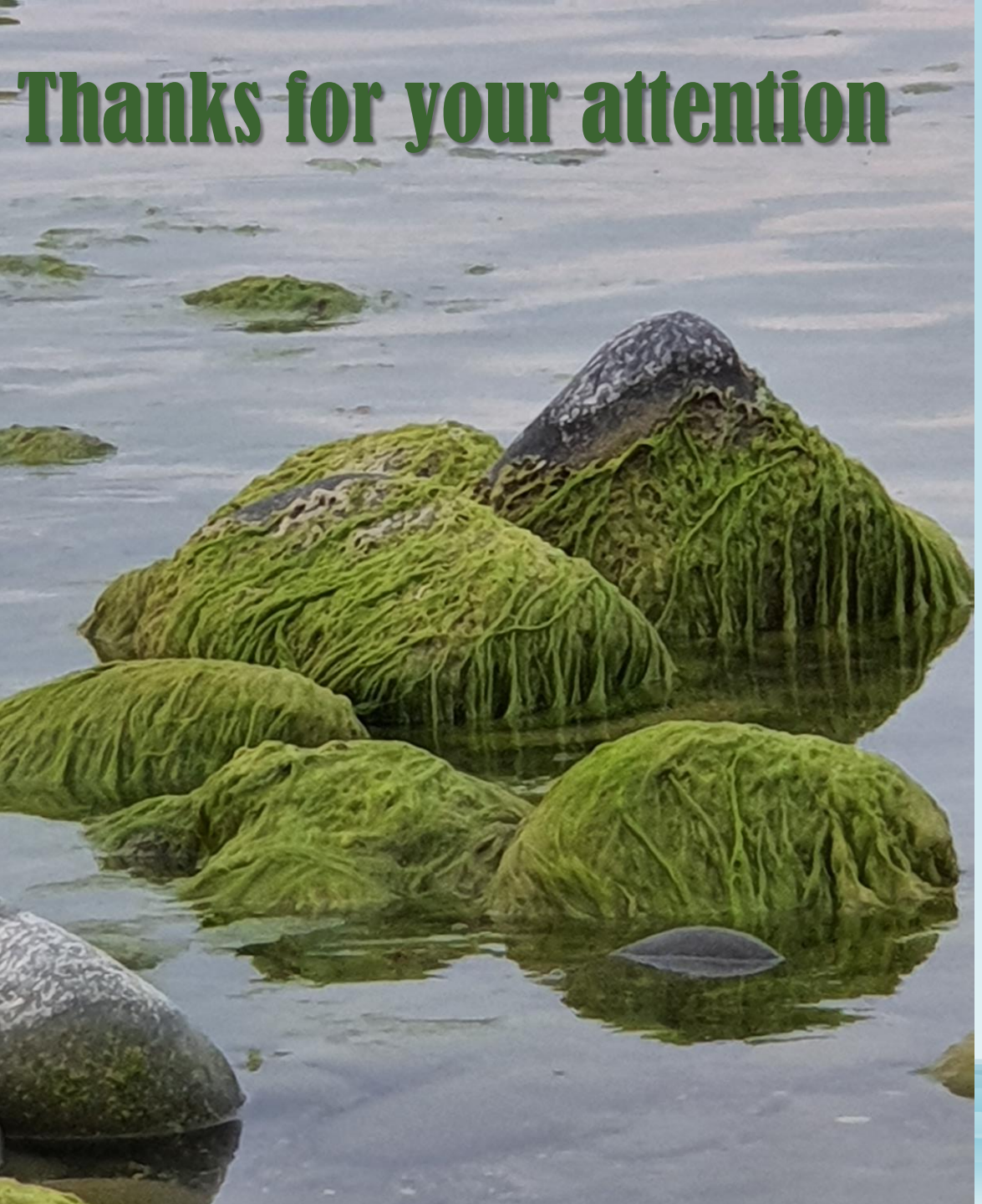
0-2 No pain	3-7 Mild	8-13 Moderate	14+ Severe

Finally, tick the box which matches the type of pain

Chronic	Acute	Acute on Chronic

Conclusion

- Continuing assessment of pain and its response to management is vital in ensuring that patients get the treatment they deserve.
- Clinicians working within a multidisciplinary team with expertise in nursing, social work, physiotherapy, occupational therapy, spiritual care, and complementary therapies ensure a holistic assessment is made of a patient's pain and a holistic management plan is implemented.



خرم آن کس که در این محنت‌گاه

خاطری را سبب تسکین است

«پروین اعتصامی»