Palliative Care

Basics and beyond

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Session objectives

- Understand the principles of palliative care

- Introduction with the definition of good death

- Improve the general knowledge of symptom management strategies in palliative care

- Recognize our current stance in provision of palliative care services

1 Introduction to Palliative Care

*You matter because you are you, and you matter to the end of your life. We will do all we can not only to help you die peacefully, **but also to live until you die**.*

-Cicely Saunders

WHO definition of palliative care:

"An approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems-- physical, psychosocial, and spiritual."

Introduction to Palliative Care

- Palliative care focuses on “caring” for the patient and family, not on “curing” the patient
- Can be valuable for any age and any stage of a serious, life-limiting illness
- Provides symptom relief and support to help patients function as well as possible
- Is used in hospitals, other community settings, or homes

Which one of the following terms better define palliative care?

- Comfort care
- Supportive care
- End-of-life care

Introduction to Palliative Care

- **Comfort care:** Enhance the quality of life for patients and their families
- **Supportive care:** Relieving the symptoms in order to improve the quality of life
- **End-of-life care**

Introduction to Palliative Care

Who Provides Palliative Care?

Nurse

Nursing Assistant

Physician

Social Worker

Psychiatrist/Psychologist

Dietitian

Chaplain

Physical/Occupational Therapist

2 The concept of good death

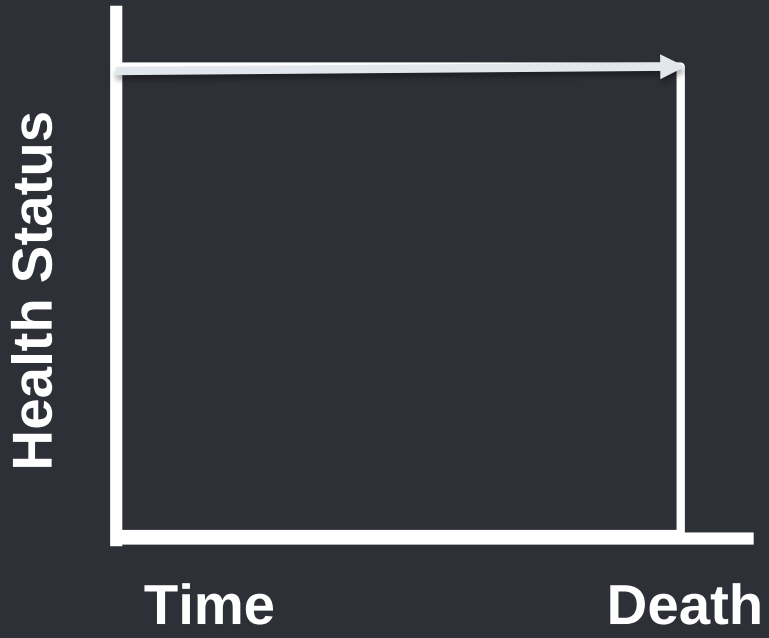
The concept of good death

A good death is “one that is **free from avoidable distress and suffering**, for patients, family, and caregivers; in general **accord with the patients' and families' wishes**; and reasonably **consistent with clinical, cultural, and ethical standards**.”

The concept of good death

Sudden death, unexpected cause

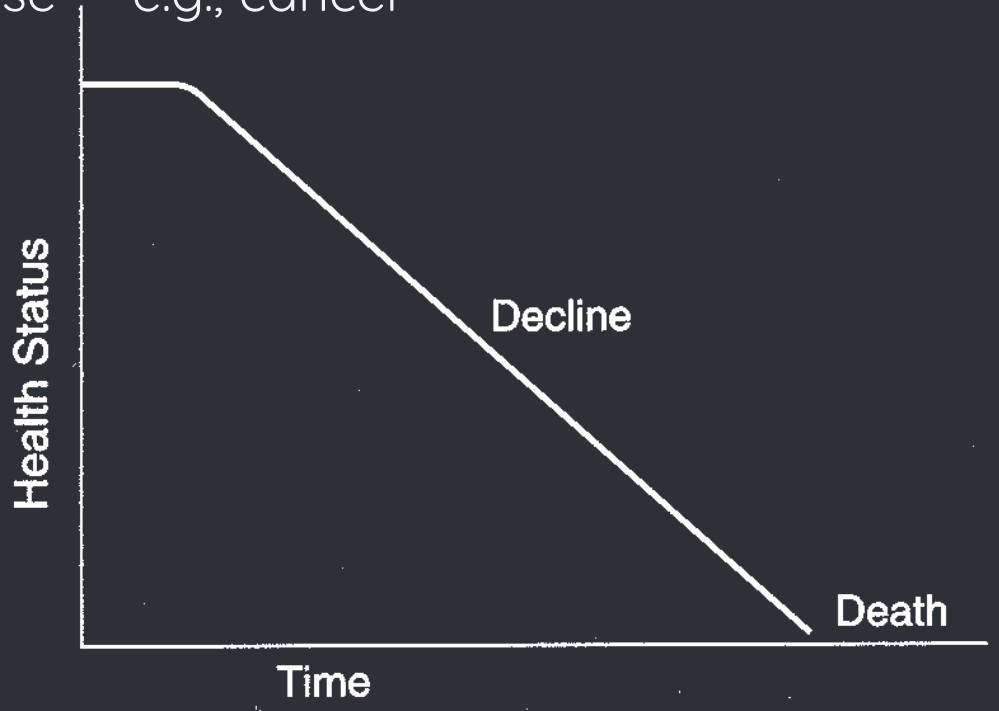
MI, accident, etc. (< 10%)



The concept of good death

Steady decline

Short “Terminal Phase” – e.g., cancer



Slow decline

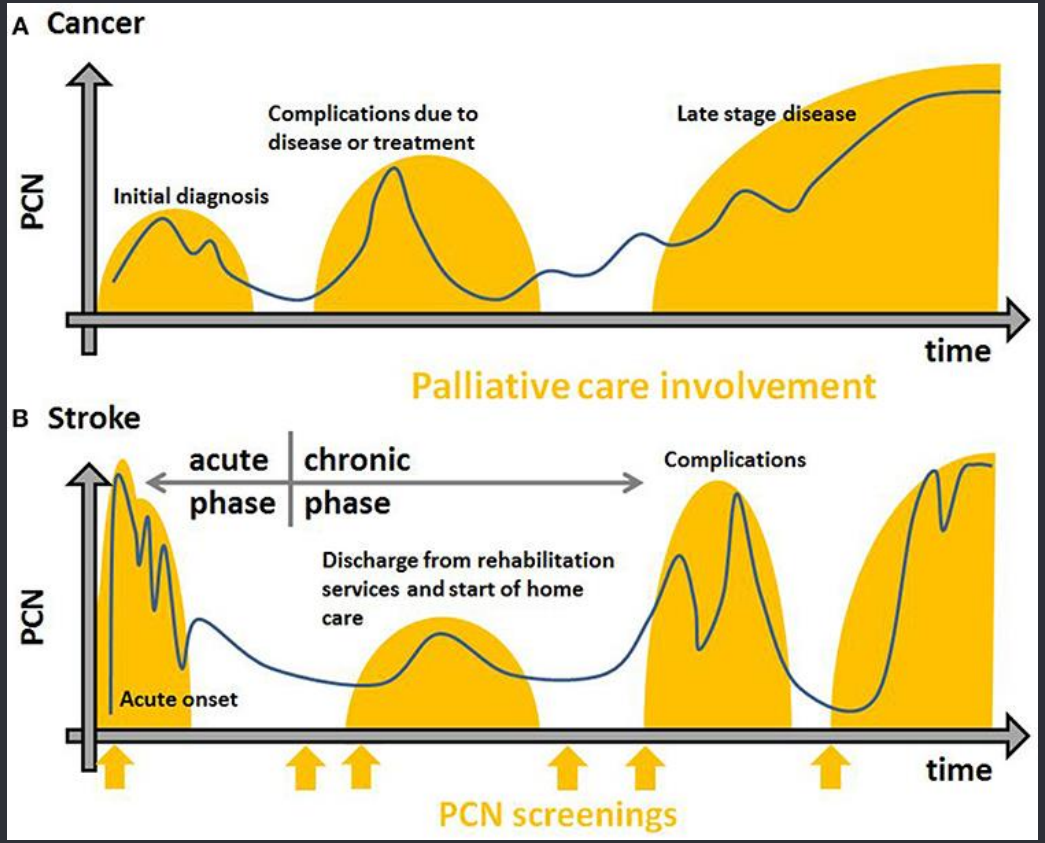
Periodic crises, sudden death – e.g., frailty, organ failure

3 Who needs palliative care?

Who needs palliative care?

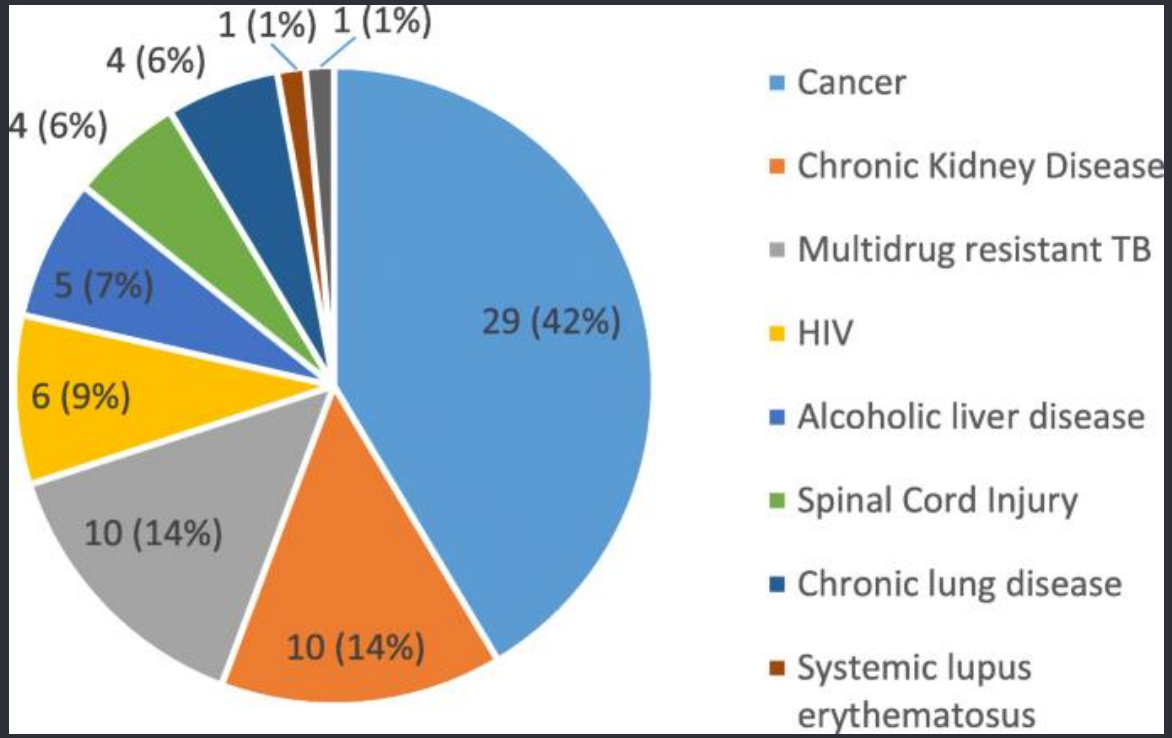
Exemplary trajectories of chronic diseases (A), e.g., cancer, heart failure, moto-neuron disease, Parkinson's disease and acute diseases (B), e.g., stroke in terms of PCN (y-axis) over time (x-axis).

The blue lines are possible courses of SB over time. Orange orbs show PC involvement. Initiation in a timely fashion to achieve best results is based on regular standardized screenings for PCN (orange arrows).



Who needs palliative care?

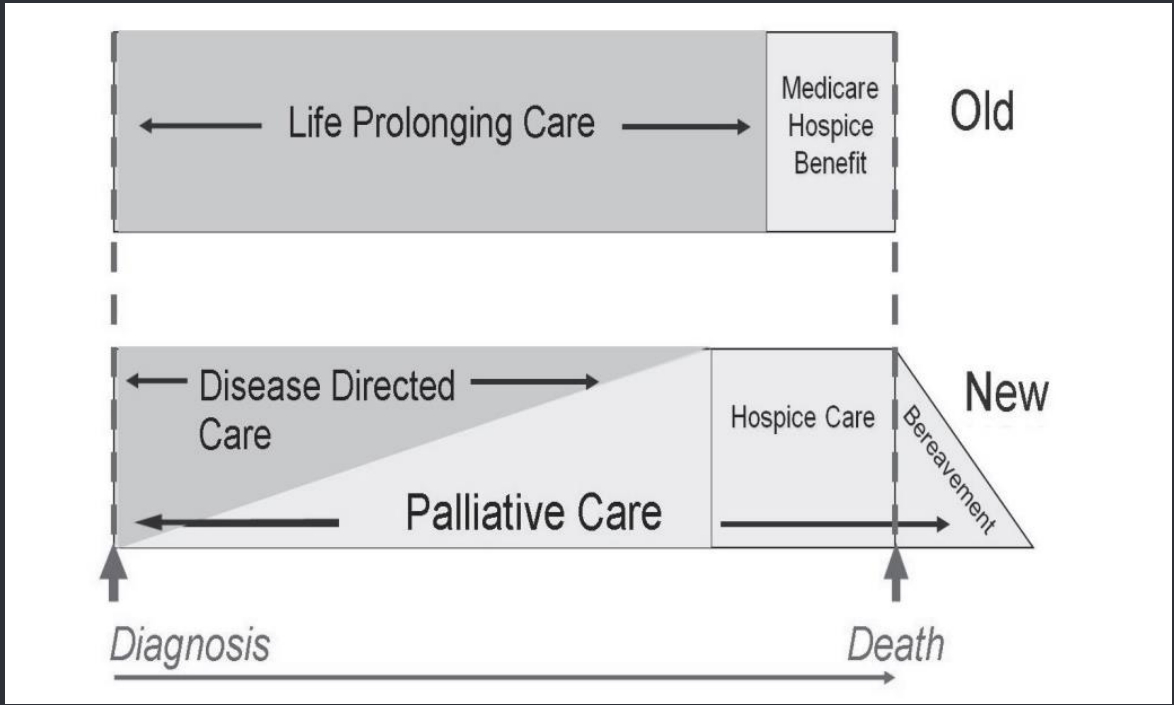
Palliative care needs among patients with advanced illnesses



*Laabar, T.D., Saunders, C., Auret, K. et al. Palliative care needs among patients with advanced illnesses in Bhutan. BMC Palliat Care **20**, 8 (2021). https://doi.org/10.1186/s12904-020-00697-9*

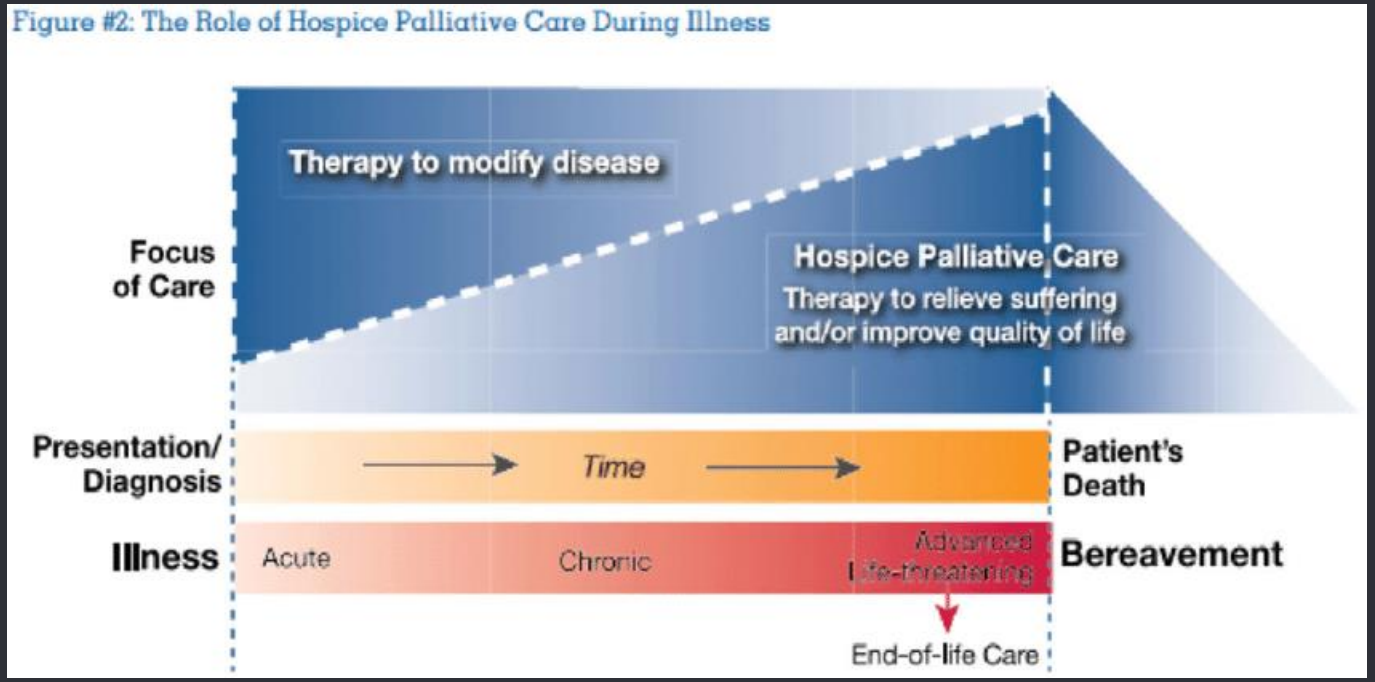
Who needs palliative care?

Historical trajectories of care pathways



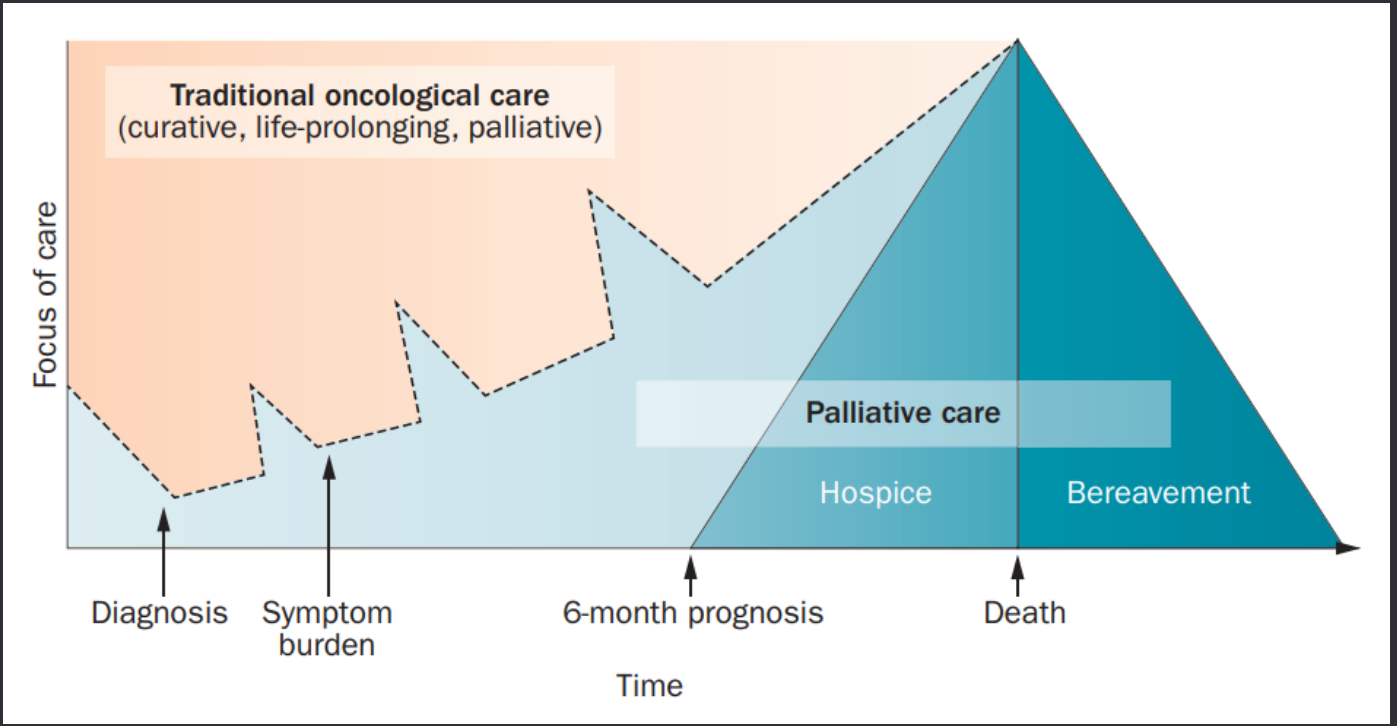
Who needs palliative care?

The alternative model of care



Who needs palliative care?

The alternative model of care



4 Where do we stand in PC provision?

Palliative Care in Global, Regional, and National Context

- Each year, an estimated **56.8 million people**, including **25.7 million in the last year of life**, are in need of palliative care.
- Worldwide, only **about 14%** of people who need palliative care currently receive it.

WHO Fact sheet on palliative care, 2021

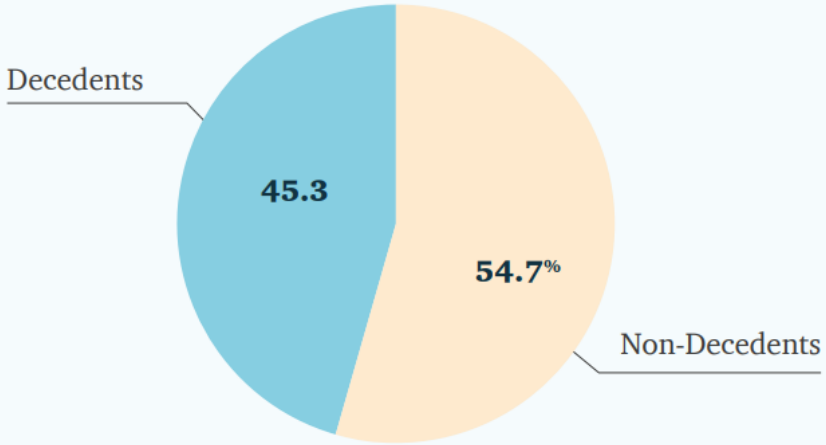
Palliative Care in Global, Regional, and National Context

Figure 9
Worldwide need for palliative care for adults, by WHO region and disease categories (20+ years; 183 countries; 2017)

Global Atlas of Palliative Care, 2nd Edition, 2020

Palliative Care in Global, Regional, and National Context

Figure 2
Need for palliative care for decedents and non-decedents, (all ages all sexes; 2017)

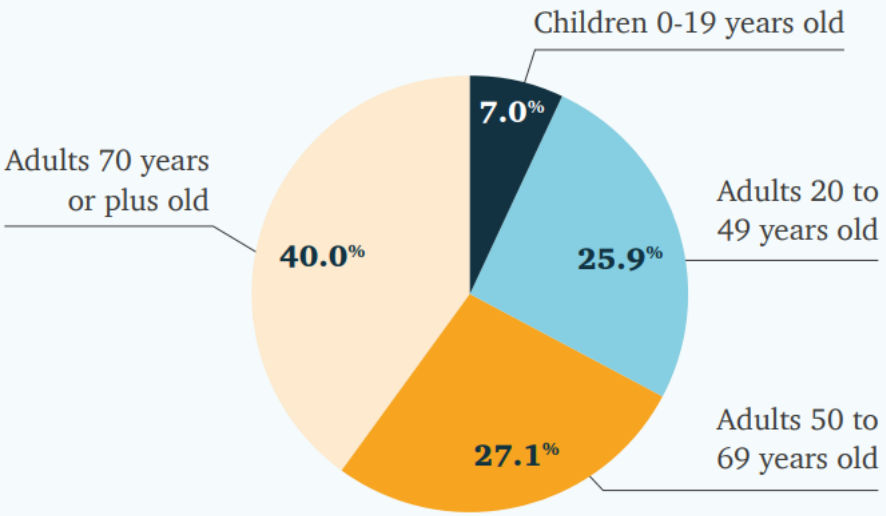


N = 56,840,123 people

Global Atlas of Palliative Care, 2nd Edition, 2020

Palliative Care in Global, Regional, and National Context

Figure 3
Worldwide need for palliative care by age group (2017)



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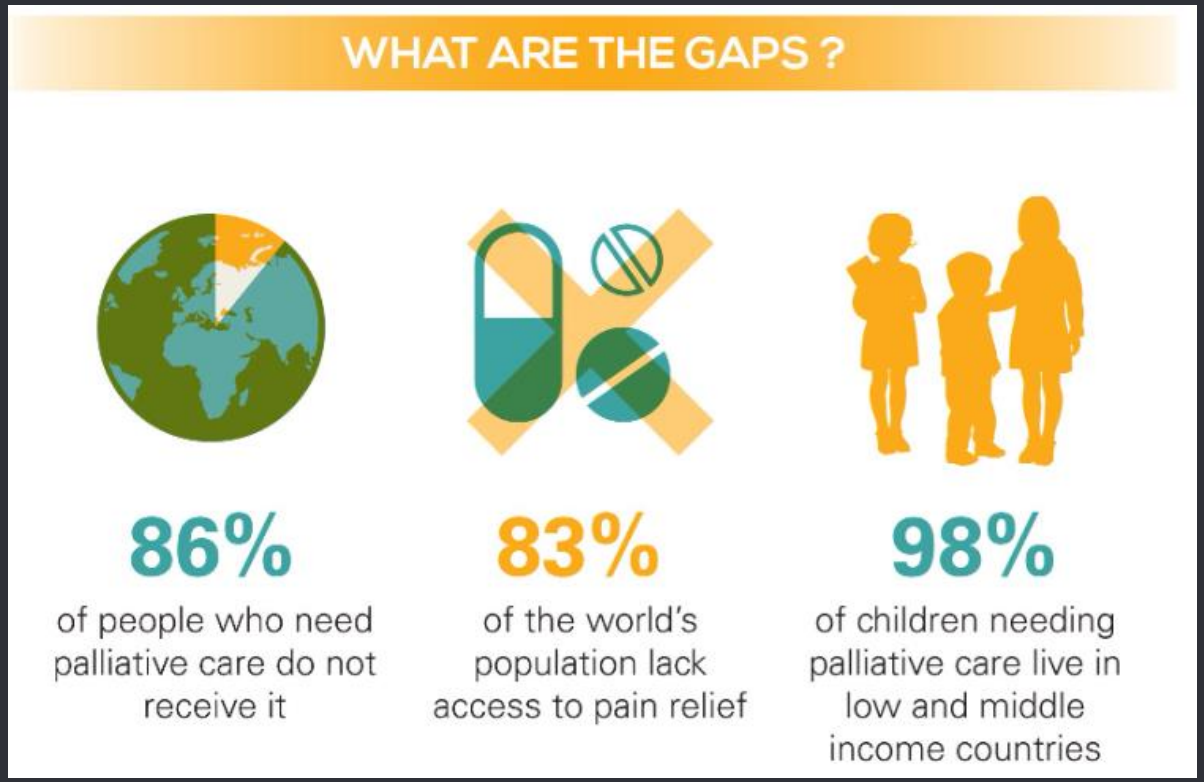
Palliative Care in Global, Regional, and National Context



WHO Fact sheet on palliative care, 2019

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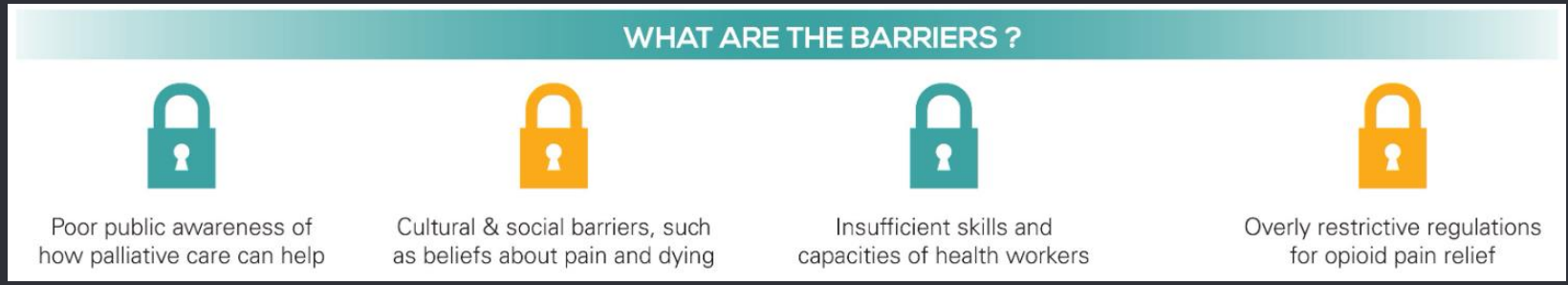


WHO Fact sheet on palliative care, 2019

Barriers to address the unmet need for palliative care:

- Exclusion of palliative care form national health policies and systems
- Limited or non-existent training on palliative care for health professionals
- Inadequate access to opioid pain relief and fail to meet international conventions on access to essential medicines

Levels of palliative care development

Group 1) No known hospice-palliative care activity

Group 2) Capacity building activity

Group 3a) Isolated palliative care provision

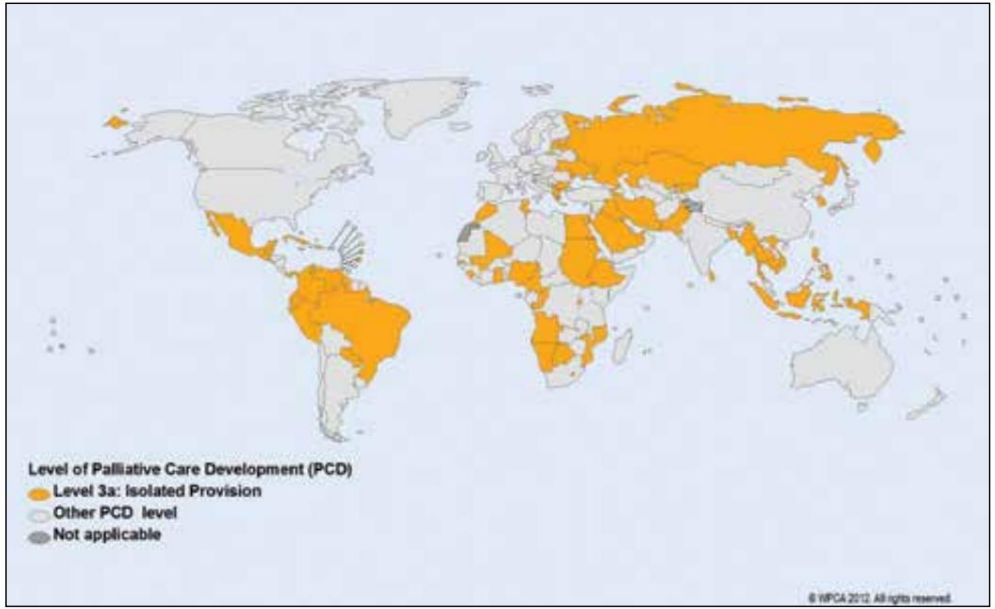
Group 3b) Generalized palliative care provision

Group 4a) Preliminary integration of hospice-palliative care services into mainstream service provision

Group 4b) Advanced integration of hospice-palliative care services into mainstream service provision

Palliative Care in Global, Regional, and National Context

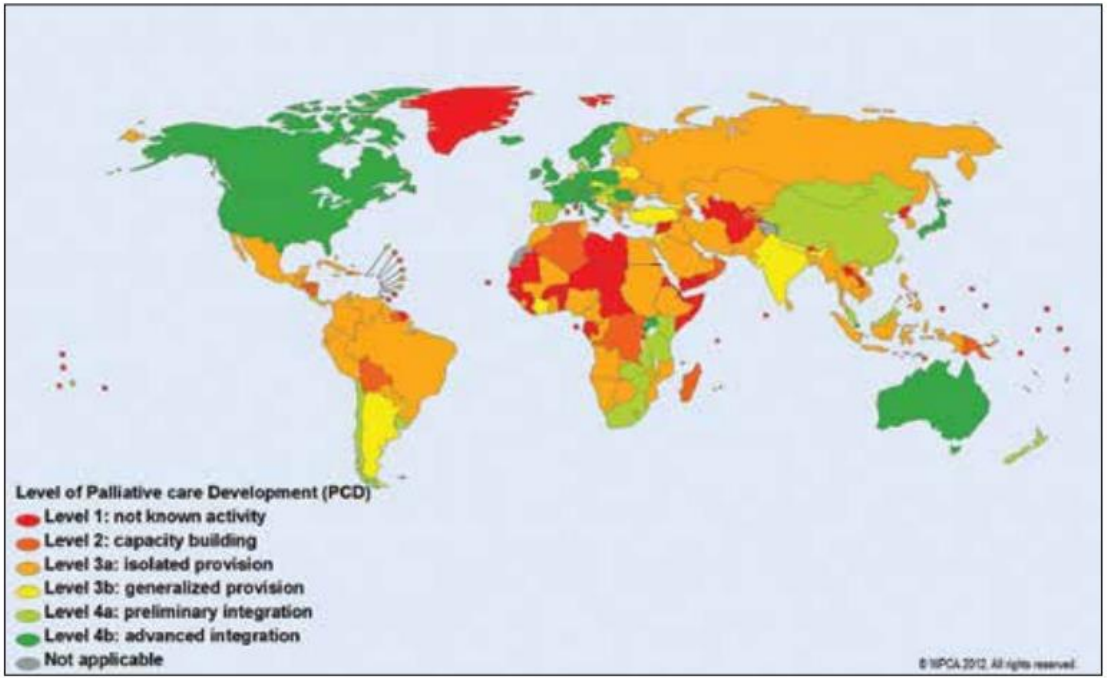
Figure 33
Countries with isolated provision of palliative care (Level 3a)



Global Atlas of Palliative Care at the End of Life, Worldwide Palliative Care Alliance (WPCA), WHO, 2010

Palliative Care in Global, Regional, and National Context

Figure 37
Levels of palliative care development – all countries



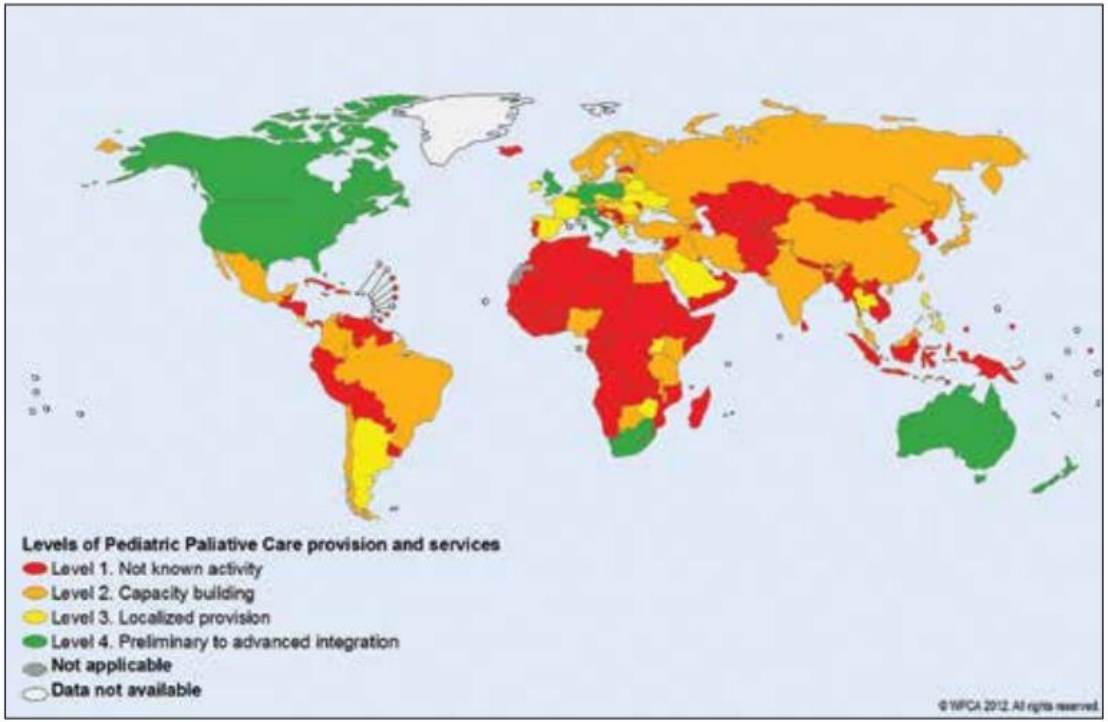
Palliative Care in Global, Regional, and National Context

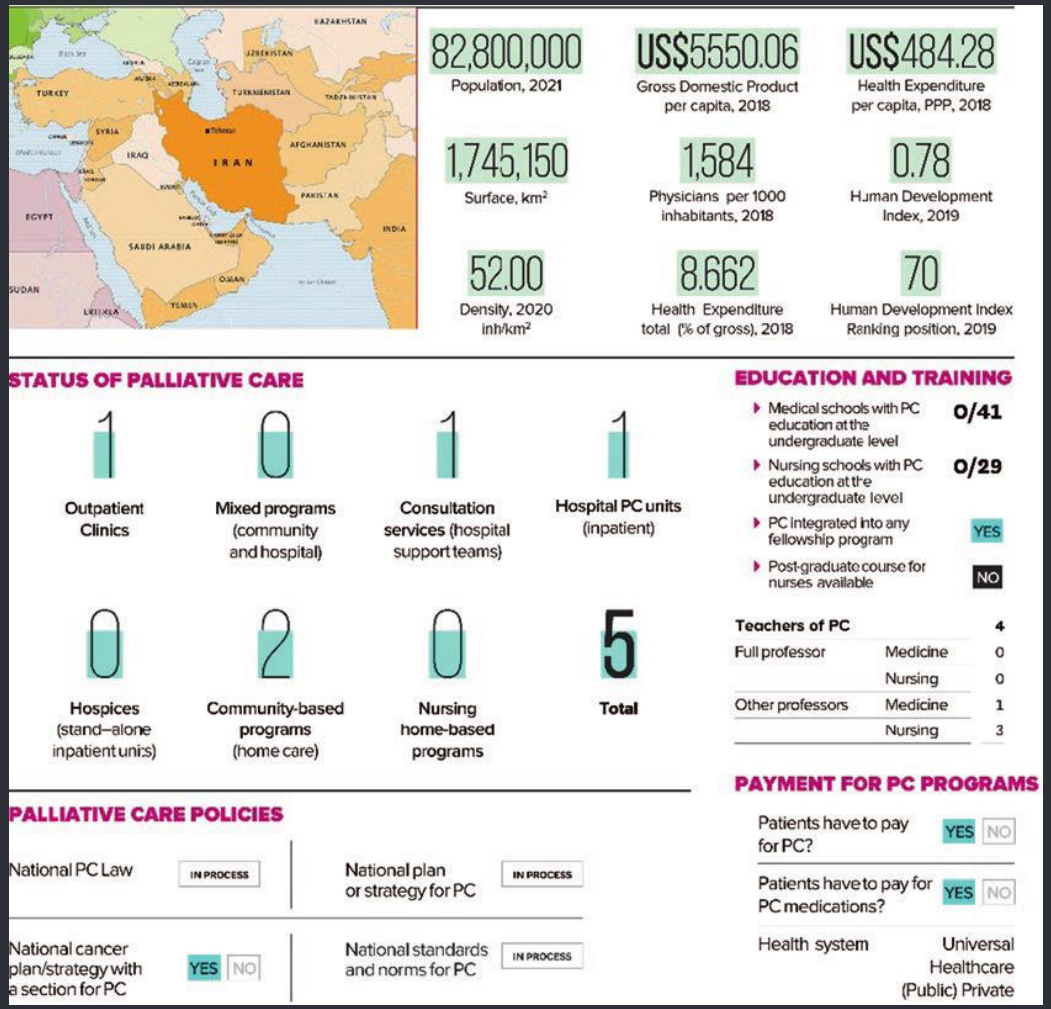
Table 2
Changes in palliative care direction by country 2006–2011

Group	Changes in palliative care direction COUNTRY 2006–2011 (+/-)
Group 1	UZBEKISTAN (- from category **2**)
Group 2	MONTENEGRO (**+** from category 1)/ALAND ISLANDS (- from category **3**) AZERBAIJAN (- from category **3**) HONDURAS (- from category **3**)
Group 3a	ANGOLA (**+** from category **1**) BAHRAIN (**+** from category **2**) BELIZE (**+** from category **2**) BRUNEI (**+** from category **2**) ETHIOPIA (**+** from category **2**) GHANA (**+** from category **2**) IRAN (**+** from category **2**) KUWAIT (**+** from category **2**) LEBANON (**+** from category **2**) LESOTHO (**+** from category **2**) MALI (**+** from category **1**) MOZAMBIQUE (**+** from category **2**) NAMIBIA (**+** from category **2**) NIUE (**+** from category **1**) PARAGUAY (**+** from category **2**) RWANDA (**+** from category **2**) SAINT LUCIA (**+** from category **2**) SUDAN (**+** from category **2**)
Group 3b	COTE D'IVORIE (**+** from category **2**) TURKEY (**+** from category **2**)/ ARGENTINA (- from category **4**)
Group 4a	CHINA (including Taiwan) (**+** from category **3**) LUXEMBOURG (**+** from category **3**) MACAU (**+** from category **3**) MALAWAI (**+** from category **3**) PUERTO RICO (**+** from category **2**) SERBIA (**+** from category **3**) SLOVAKIA (**+** from category **3**) TANZANIA (**+** from category **3**) URUGUAY (**+** from category **3**) ZAMBIA (**+** from category **3**) ZIMBABWE (**+** from category **3**)
Group 4b	(New categorisation)

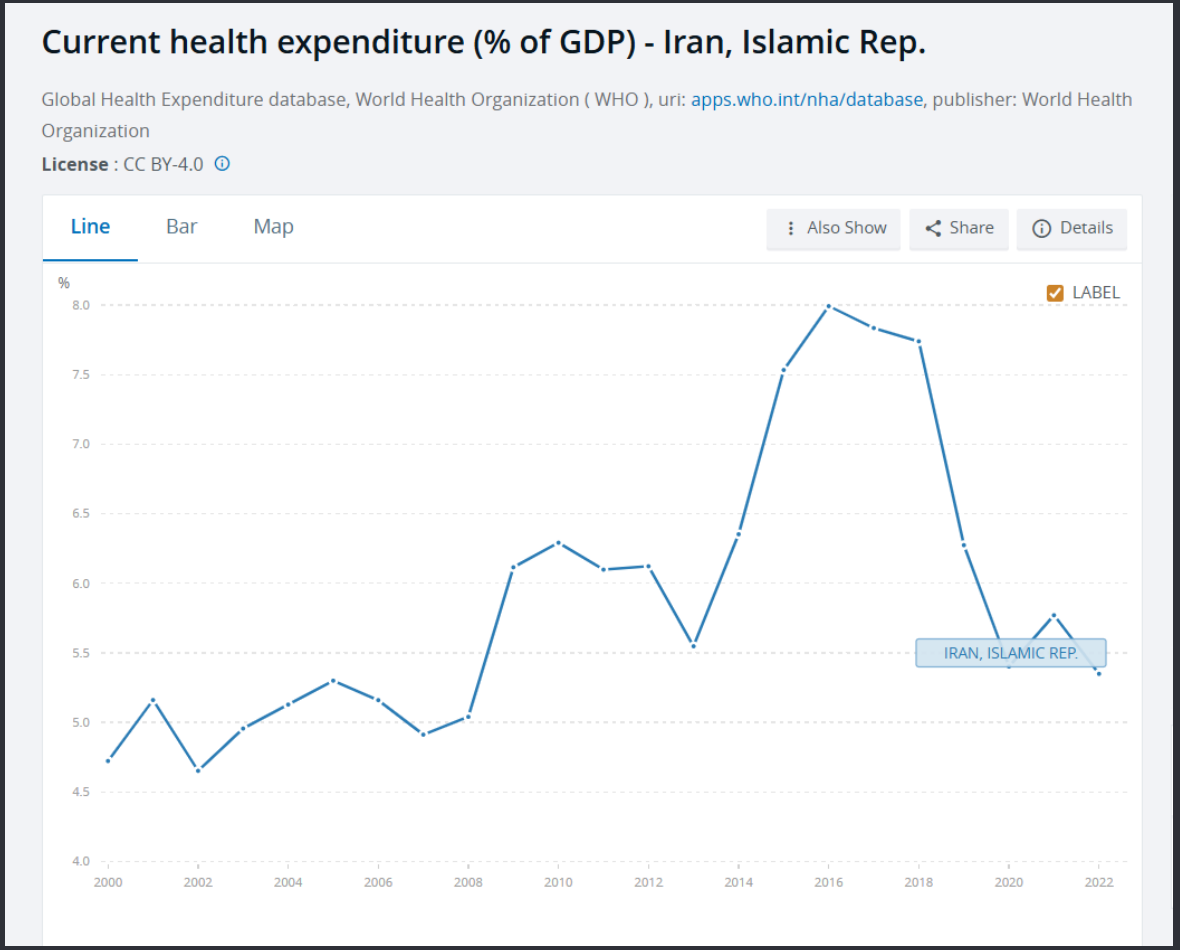
Palliative Care in Global, Regional, and National Context

Figure 38
Levels of paediatric palliative care development – all countries

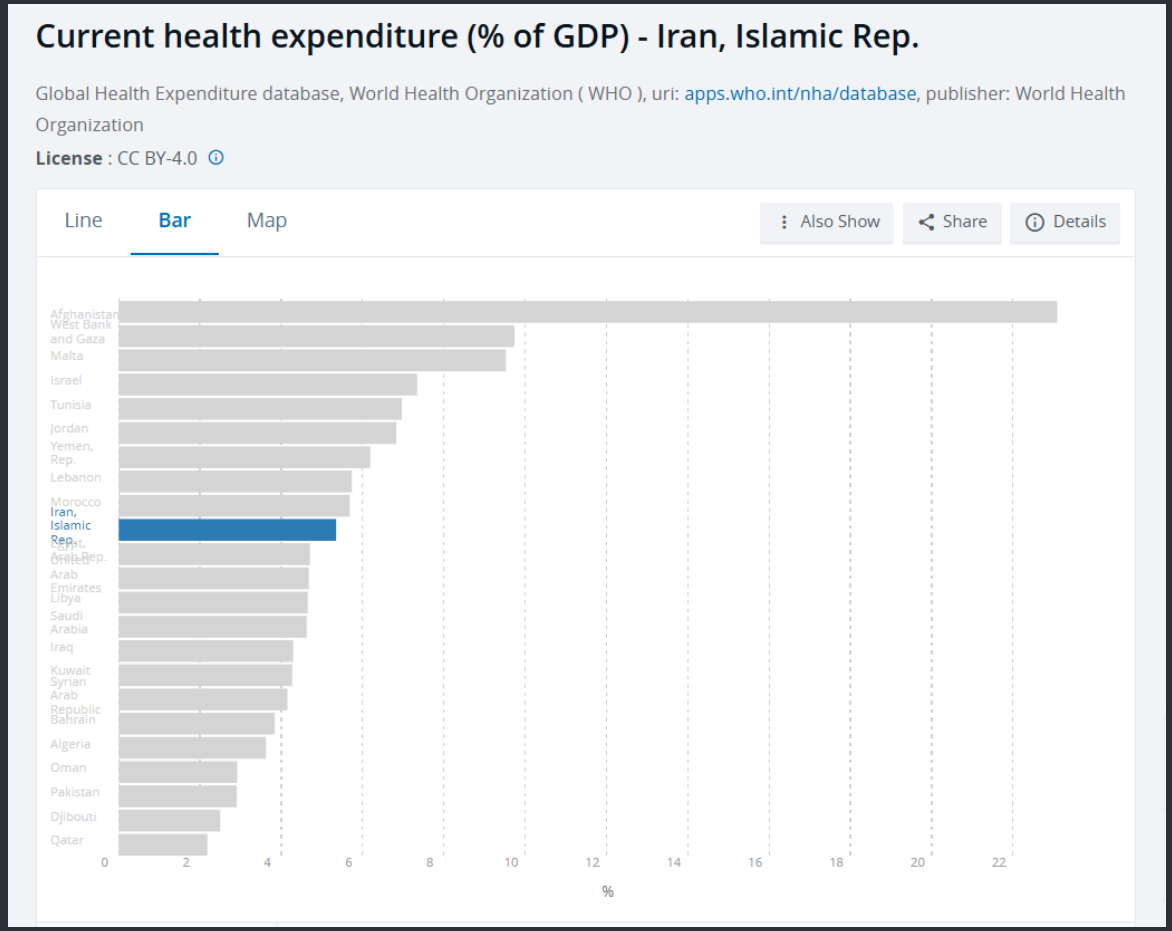




Radfar, A. (2022). Integrating Palliative Care into Primary Care: An Educational Project to Meet an Unmet Need. In: Schmidt-Straßburger, U. (eds) Improving Oncology Worldwide. Sustainable Development Goals Series. Springer, Cham. https://doi.org/10.1007/978-3-030-96053-7_15



Current health expenditure (% of GDP) - Iran, Islamic Rep.
World Health Organization Global Health Expenditure database (https://data.worldbank.org, retrieved August 2025).



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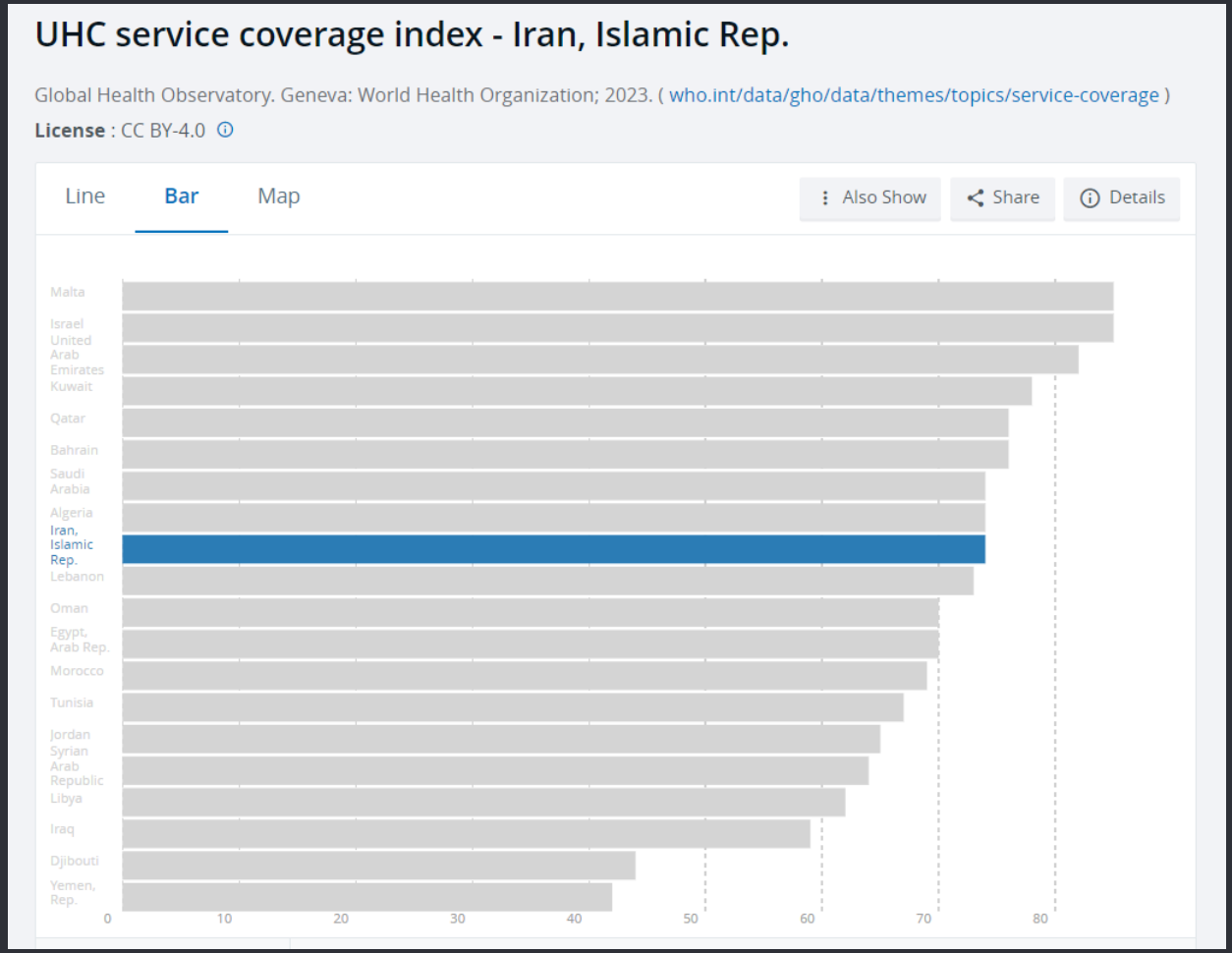
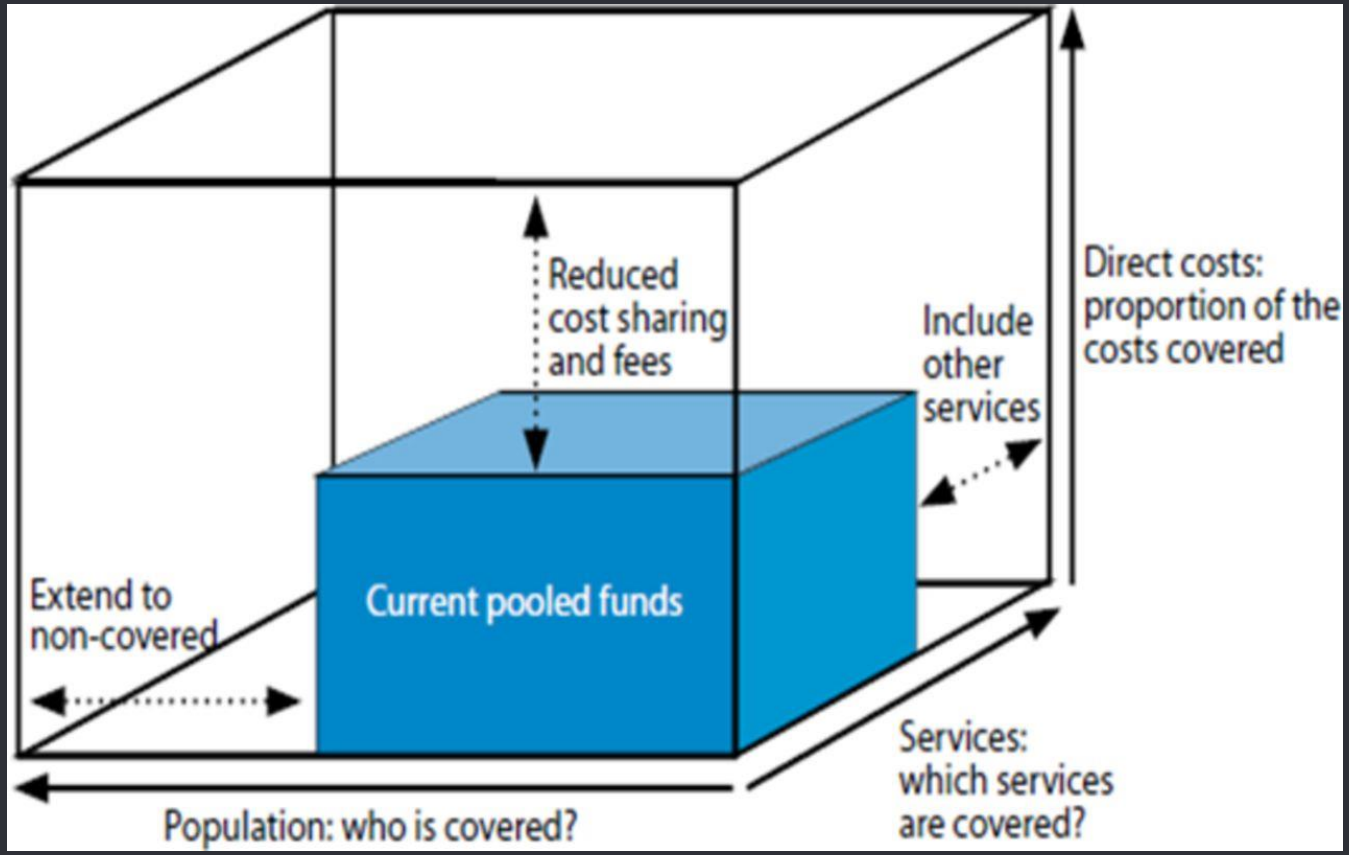
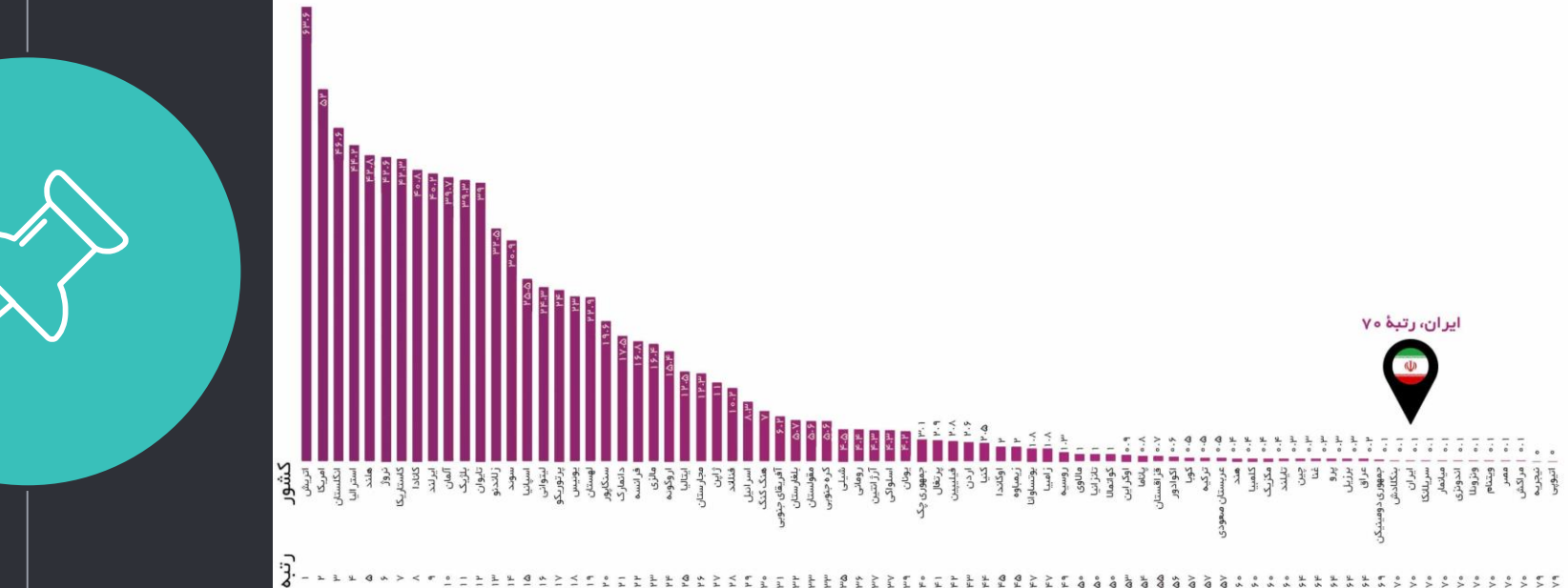


UHC service coverage index - Iran, Islamic Rep. Global Health Observatory. Geneva: World Health Organization (https://data.worldbank.org, retrieved on August 2025).



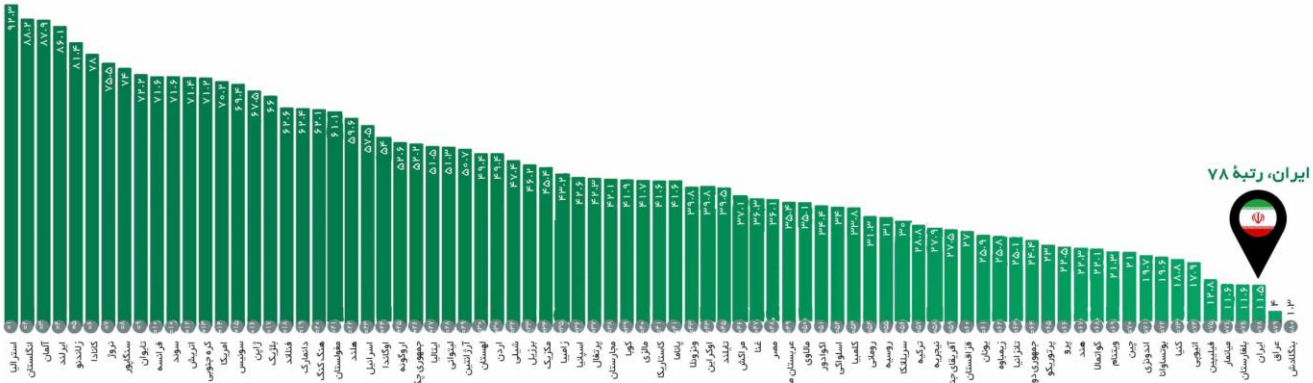
R Baltussen, M P Jansen, L Bijlmakers, N Tromp, A E Yamin, O F Norheim - Progressive realisation of universal health coverage: what are the required processes and evidence?: BMJ Global Health 2017;2:e000342.

چند درصد از کسانی که به مراقبت‌های تسکینی نیاز دارند، به آن دسترسی دارند؟



منبع: فهرست کیفیت مرگ؛ رتبه بندی کشورها در مراقبت‌های تسکینی (The ۲۰۱۵ Quality of Death Index. Ranking palliative care across the world)، بنیاد لین (Lien) با همکاری سرویس اطلاعاتی مؤسسه اکونومیست، ۲۰۱۵.

دانش پزشکان و پرستاران از مراقبت های تسکینی چقدر است؟



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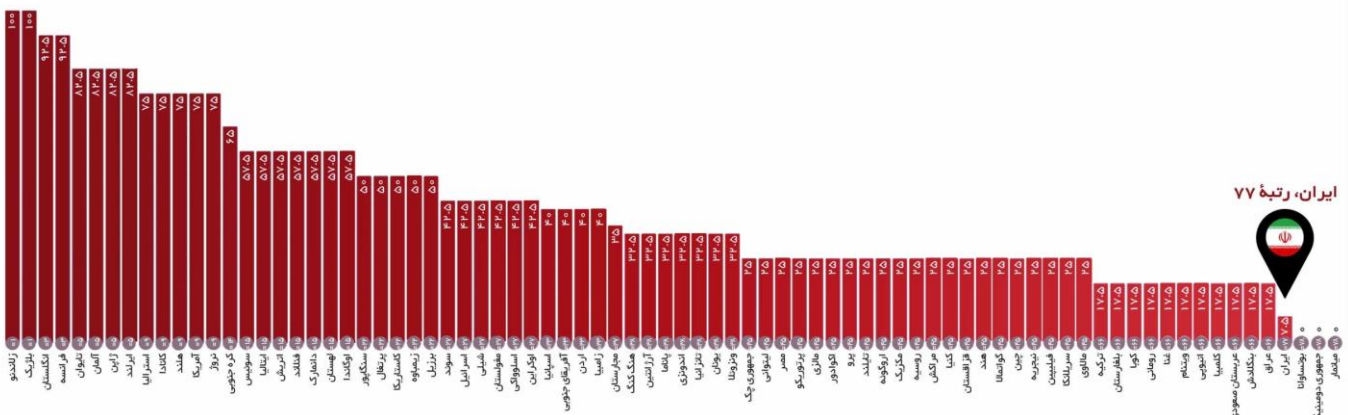
مردم چقدر در مورد مراقبت‌های تسکینی می‌دانند و در ارائهٔ آن مشارکت می‌کنند؟



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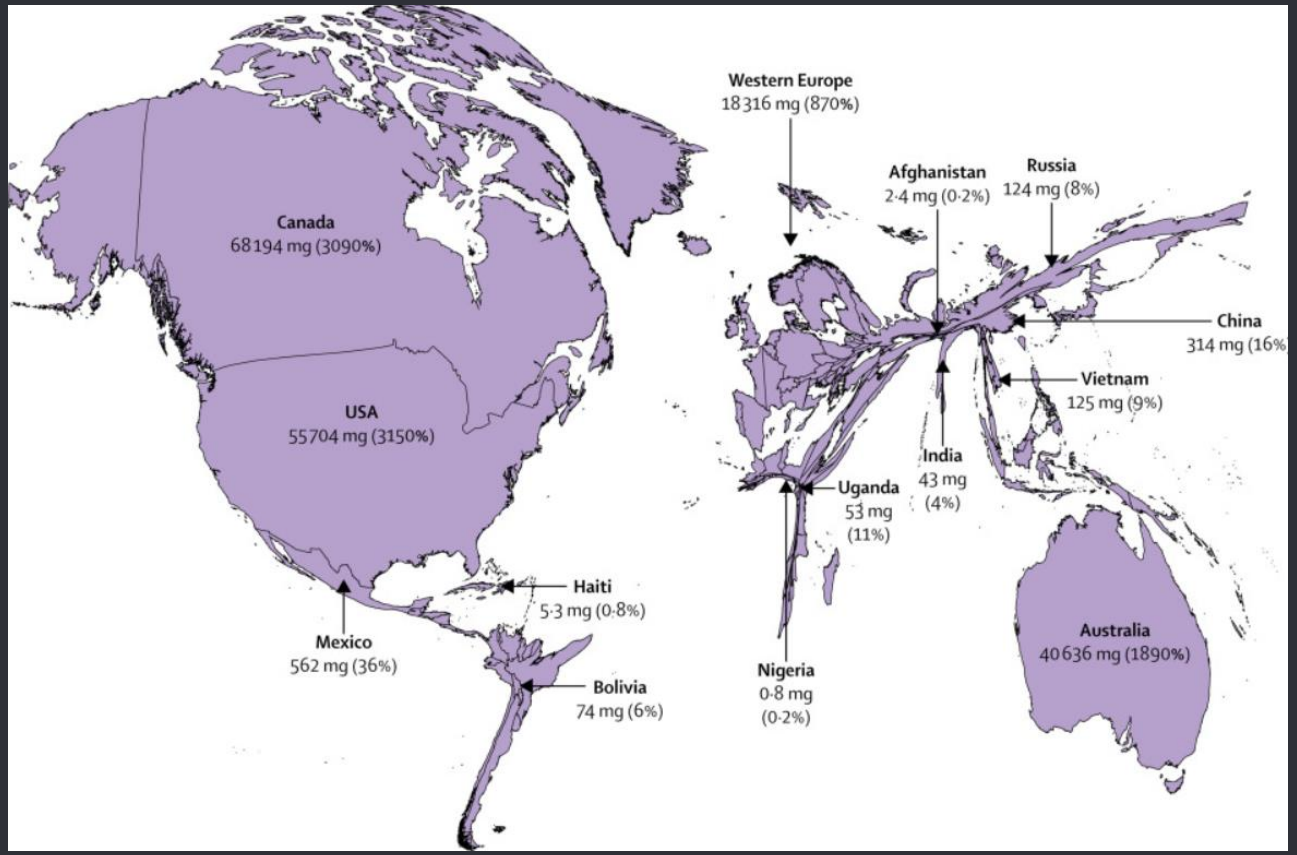
Where do we stand in palliative care provision?



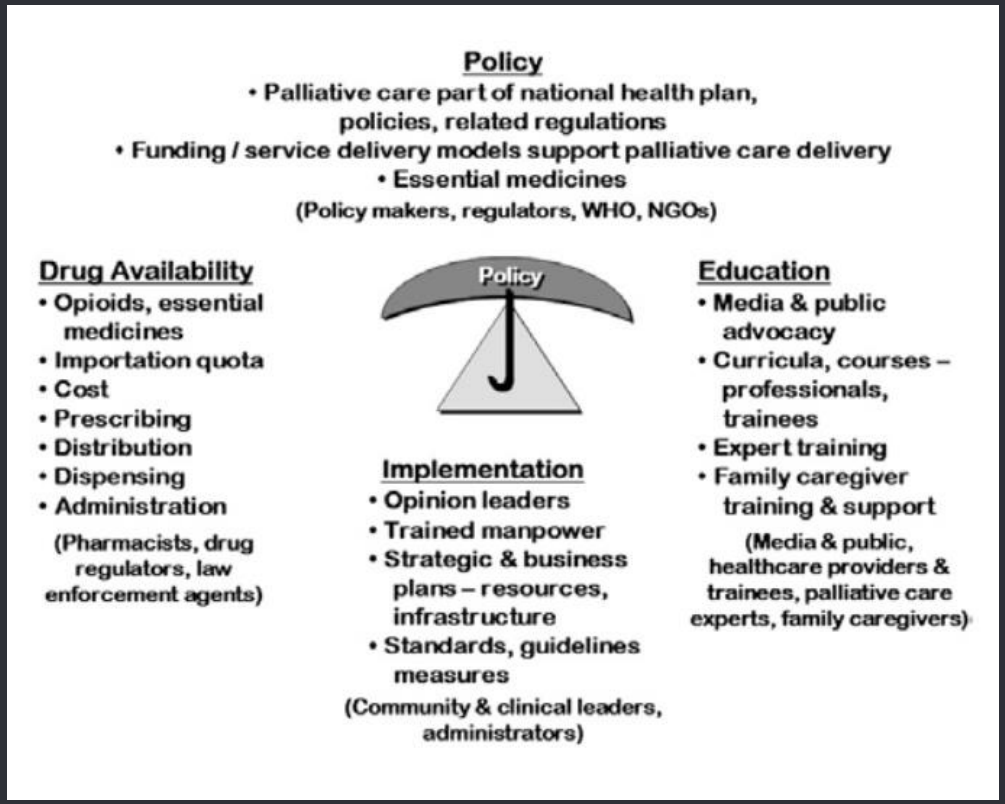
Distributed opioid morphine-equivalent (morphine in mg/patient in need of palliative care, average 2010–13), and estimated percentage of need that is met for the health conditions most associated with serious health-related suffering

The Lancet Commission on Palliative Care and Pain Relief—findings, recommendations, and future directions Knaul, Felicia M et al. The Lancet Global Health, Volume 6, S5 - S6

Palliative Care in Global, Regional, and National Context

WHO Fact sheet on palliative care, 2019

Palliative Care in Global, Regional, and National Context



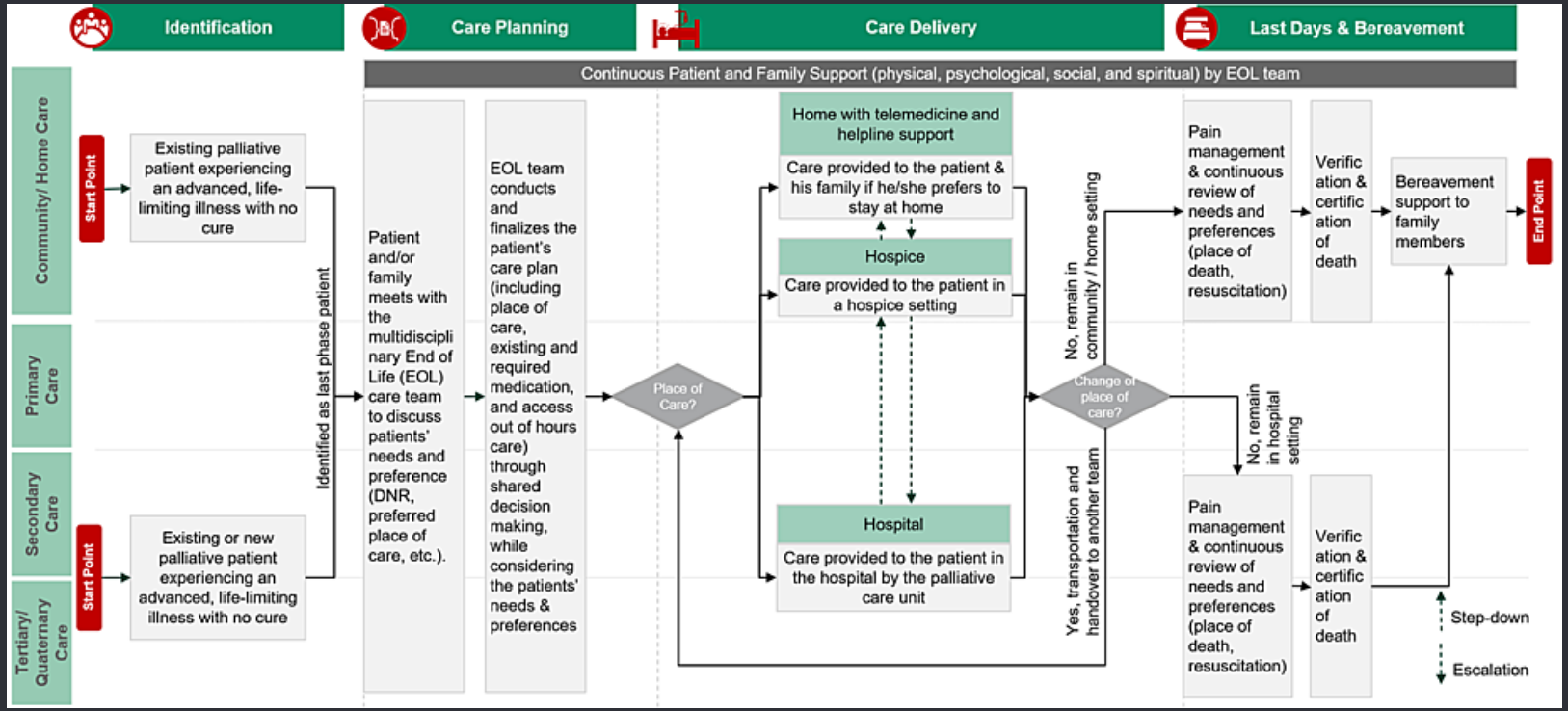
Public health model for palliative care development

All these areas are related and will require education, essential medicines, policies, and the social and political support needed to make palliative care a priority and a reality throughout the world.

Stjernswärd, J., Foley, K. M., & Ferris, F. D. (2007). The public health strategy for palliative care. Journal of pain and symptom management, 33(5), 486–493. https://doi.org/10.1016/j.jpainsymman.2007.02.016

5 Different aspects of palliative care

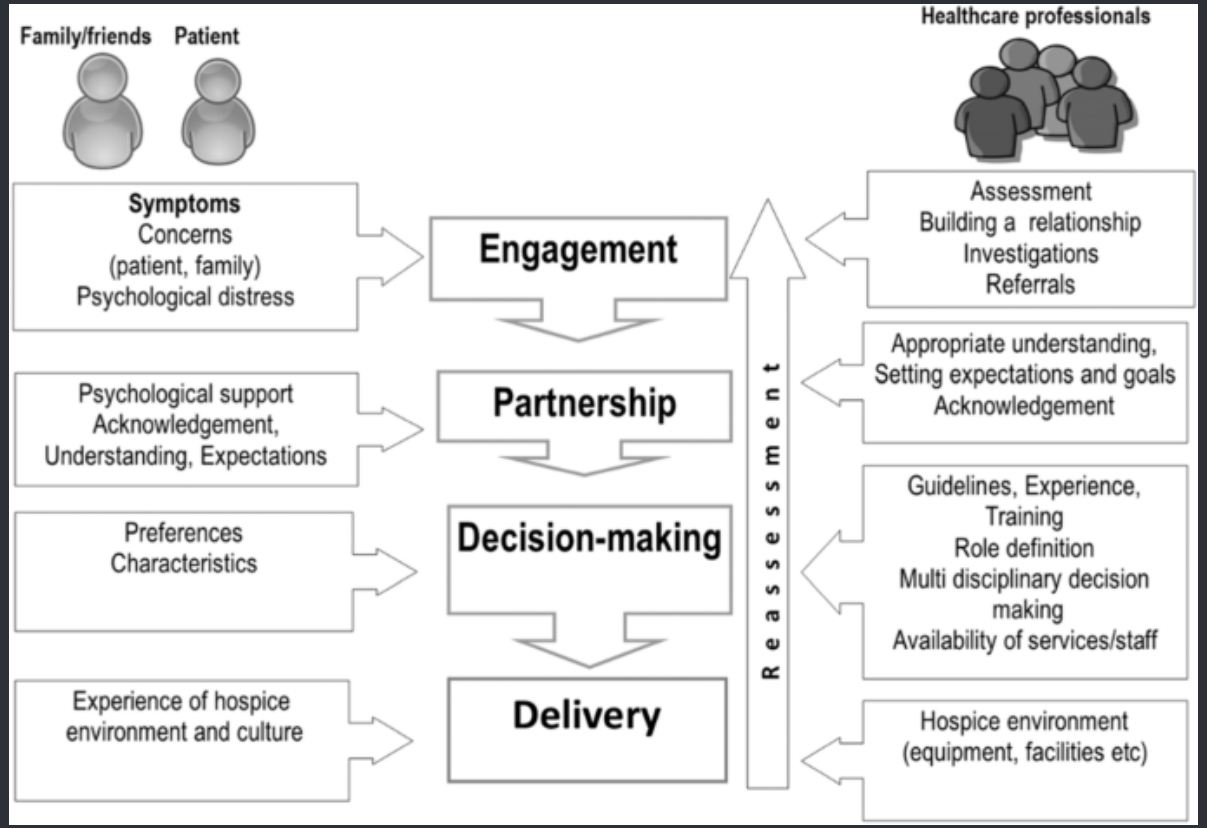
Different aspects of palliative care



Alshammary S A, Punalvasal Duraisamy B, Salem L, et al. ***Integration of Palliative Care Into Primary Health Care: Model of Care Experience****. Cureus 12(6): e8866.*


The **multi disciplinary approach** to palliative care is essential to ensure a genuinely holistic perspective.

Different aspects of palliative care



Symptoms at End-of-Life

Pain: Common, complex

Respiratory Symptoms: Shortness of breath, coughing, wheezing

Gastrointestinal Symptoms: Nausea, constipation

Psychological Symptoms: Depression, delirium, anxiety

…

Different aspects of palliative care

- Around the clock vs. PRN medications, especially for pain
- Oxygen, nebulizers, diuretics, antitussive w. codeine, prednisone
- Anti-nausea medications, gentle bowel stimulants
- Anti-depressants, anxiolytics
- Non-pharmacological therapies

…

Pain assessment

Types of pain

TYPE			NEURAL MECHANISM	EXAMPLE
Nociceptive	Visceral		Stimulation of pain receptors on normal sensory nerve endings	Hepatic capsule stretch
	Somatic			Bone metastases
Neuropathic	Nerve compression		Stimulation of *nervi nervorum*	Sciatica due to vertebral metastasis with compression of L4, L5 or S1 nerve root
	Nerve injury	Peripheral	Lowered firing threshold of sensory nerves (deafferentiation pain)	Tumour infiltration or destruction of brachial plexus
		Central	Injury to central nervous system	Spinal cord compression by tumour
		Mixed	Peripheral and central injury	Central sensitization due to unrelieved peripheral neuropathic pain
	Sympathetically maintained		Dysfunction of sympathetic system	Chronic regional pain syndrome following fracture or other trauma

Pain assessment

Site	Where does it pain?
Frequency	Continuous or Intermittent If intermittent then, • How often in a day? • How long does it last?
Impact on activity	Does it affect your work/activities of daily living? Does it affect your sleep?
Medication history	What drugs did you take for the pain? What is the route? How often do you take? Does it give you relief? How long does the relief last? Are there any side effects?

Pain assessment

Pain History (OPQRST)	
Onset	When did the pain start?
Provocative/**P**alliative factors	• What makes the pain worse? • What makes the pain better?
Quality	What exactly is it like? • Dull aching pain • Sharp pain • Burning pain • Lancinating pain, etc
Radiation	Does it spread anywhere?
Severity	How severe it is? • Mild • Moderate • Severe
Temporal factors	Does it come and go? Is it worse at any particular time of the day or the night?

Pain assessment

Numerical rating scale
(for over 9 years old)

To assess the intensity of pain following pain scales can be used.

- Numerical rating scale (For adults)
- Wong-Baker FACES pain rating scale (For paediatric age group)
- Categorical scale

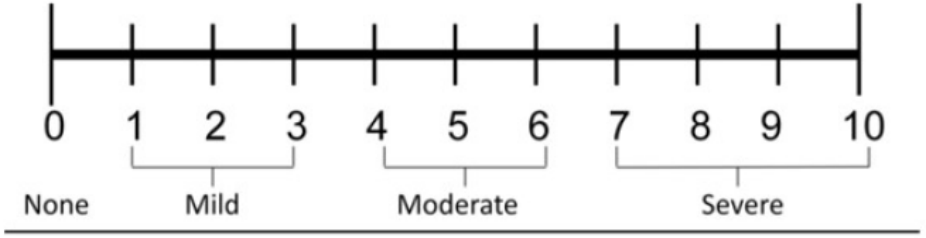
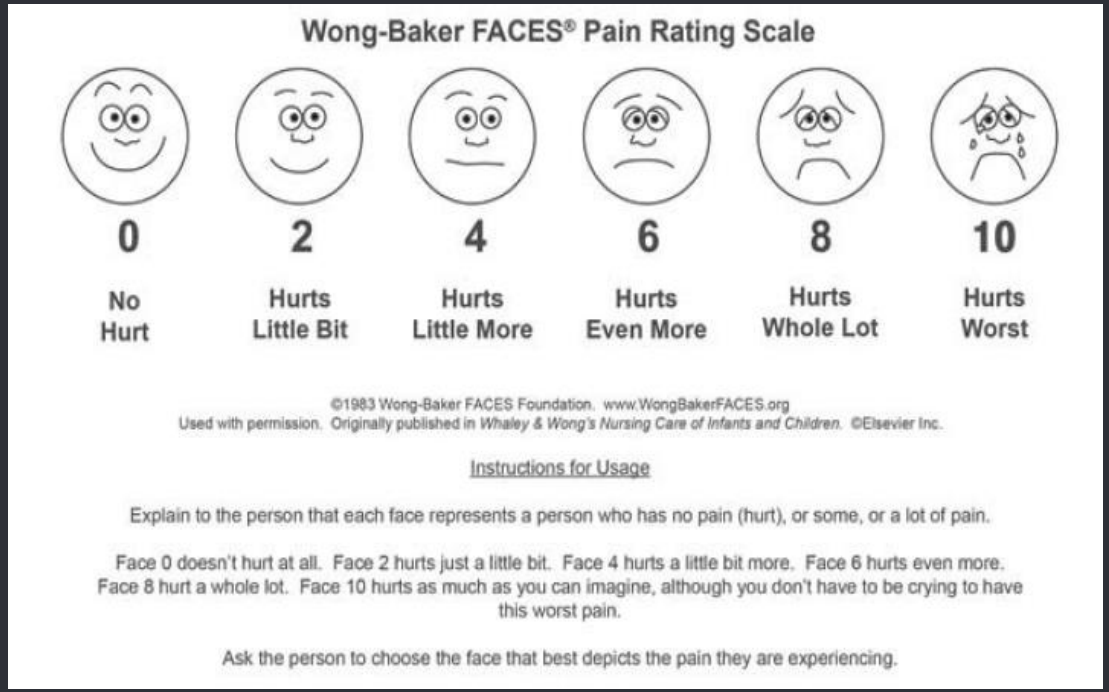


Figure 6: Numerical rating scale

Pain assessment

Wong-Baker FACES pain rating scale
(for over 3 years old)



Pain assessment

Critical Care Pain Observation Tool (CPOT)

(assessment of pain in patients who are critically ill or unable to communicate verbally)

INDICATOR	DESCRIPTION	SCORE	
Facial expression	No muscular tension observed	Relaxed, neutral	0
	Presence of frowning, brow lowering, orbit tightening, and levator contraction	Tense	1
	All of the above facial movements plus eyelid tightly closed	Grimacing	2
Body movements	Does not move at all (does not necessarily mean absence of pain)	Absence of movement	0
	Slow, cautious movements, touching or rubbing the pain site, seeking attention through movements	Protection	1
	Pulling tube, attempting to sit up, moving limbs/thrashing, not following commands, striking at staff, trying to climb ou of bed	Restlessness	2
Muscle tension Evaluation by passive flexion and extension of upper extremities	No resistance to passive movements	Relaxed	0
	Resistance to passive movements	Tense, rigid	1
	Strong resistance to passive movements, inability to complete them	Very tense or rigid	2
Compliance with the ventilator	Alarms not activated, easy ventilation	Tolerating ventilator or movement	0
	Alarms stop spontaneously	Coughing but tolerating	1
OR	Asynchrony: blocking ventilation, alarms frequently activated	Fighting ventilator	2
Vocalization (extubated patients)	Talking in normal tone or no sound	Talking in normal tone or no sound	0
	Sighting, moaning	Sighting, moaning	1
	Crying out, sobbing	Crying out, sobbing	2
Total, range			0–8

Pain assessment

The Pain Assessment in Advanced Dementia tool (PAINAID)

PAIN ASSESSMENT IN ADVANCED DEMENTIA (PAINAID)				
	0	1	2	SCORE
Breathing independant of vocalization	Normal	Occasioinal labored breathing. Short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-Stokes respirations.	
Negative vocalization	None	Occasional moan or groan. Low-level speech with a negative or disapproving quality.	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial expression	Smiling, or inexpressive	Sad. Frightened. Frown	Facia grimacing	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting.	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out.	
Consolability	No need to console	Distracted or reassured by voice or touch.	Unable to console, distracg or reassure.	
			TOTAL	

Pain management

Non-opioid vs opioid options

MEDICINE GROUP	MEDICINE CLASS	EXAMPLE MEDICINES
Non-opioids	Paracetamol	Paracetamol oral tablets and liquid. Rectal suppositories, injectable
	NSAIDs	Ibuprofen oral tablets and liquid Ketorolac oral tablets and injectable Acetylsalicylic acid oral tablets and rectal suppositories
Opioids	Weak opioids	Codeine oral tablets and liquid and injectable
	Strong opioids	Morphine oral tablet and liquid and injectable Hydromorphone oral tablets and liquid and injectable Oxycodone oral tablets and liquid Fentanyl injectable, transdermal patch, transmucosal lozenge Methadone oral tablet, liquid, injectable

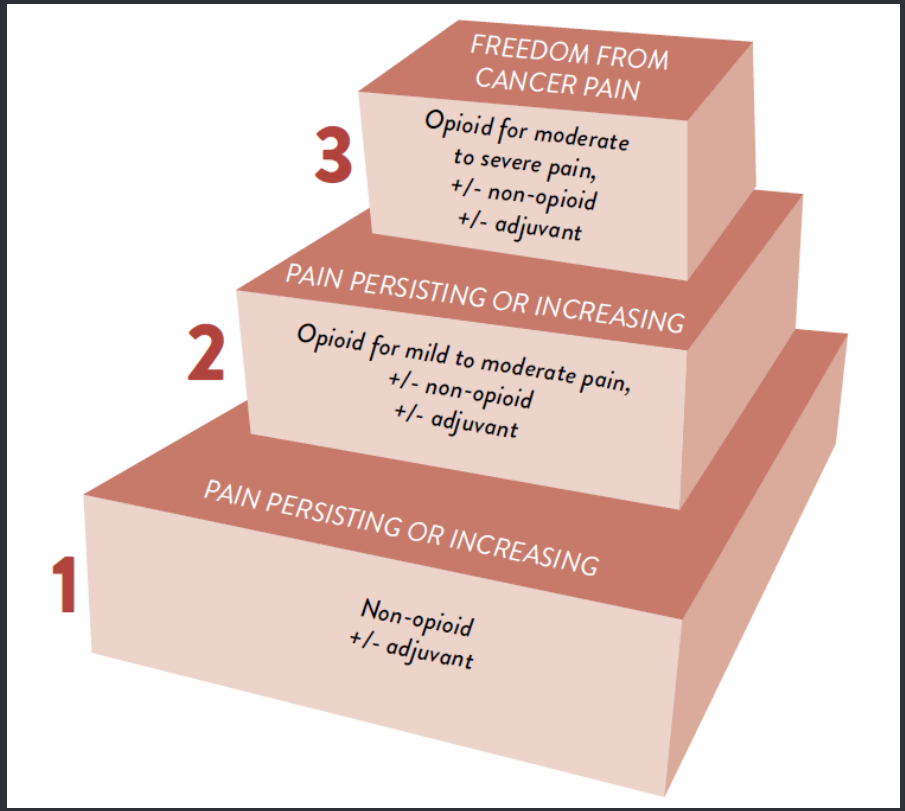
Pain management

Adjuvants

MEDICINE GROUP	MEDICINE CLASS	EXAMPLE MEDICINES
Adjuvants	Steroids	Dexamethasone oral tablet and injectable Methylprednisolone oral tablets and injectable Prednisolone oral tablets
	Antidepressants	Amitriptyline oral tablets Venlafaxine oral tablets
	Anticonvulsants	Carbamazepine oral tablets and injectable
	Bisphosphonates	Zoledronate injectable

Pain management

The three-step analgesic ladder



Pain management

Approximate potency of opioids relative to morphine

ANALGESIC	POTENCY RELATIVE TO MORPHINE	DURATION OF ACTION (HOURS)[b]
Codeine Dihydrocodeine	1/10	3–6
Pethidine	1/8	2–4
Tapentadol	1/3	4–6
Hydrocodone (not United Kingdom)	2/3	4–8
Oxycodone	1.5 (2)[c]	3–4
Methadone	5–10[d]	8–12
Hydromorphone	4–5 (5–7.5)[d]	4–5
Buprenorphine (SL)	80	6–8
Buprenorphine (TD)	100 (75–115)[c]	Formulation dependent (72–168)
Fentanyl (TD)	100 (150)[c]	72

Different aspects of palliative care

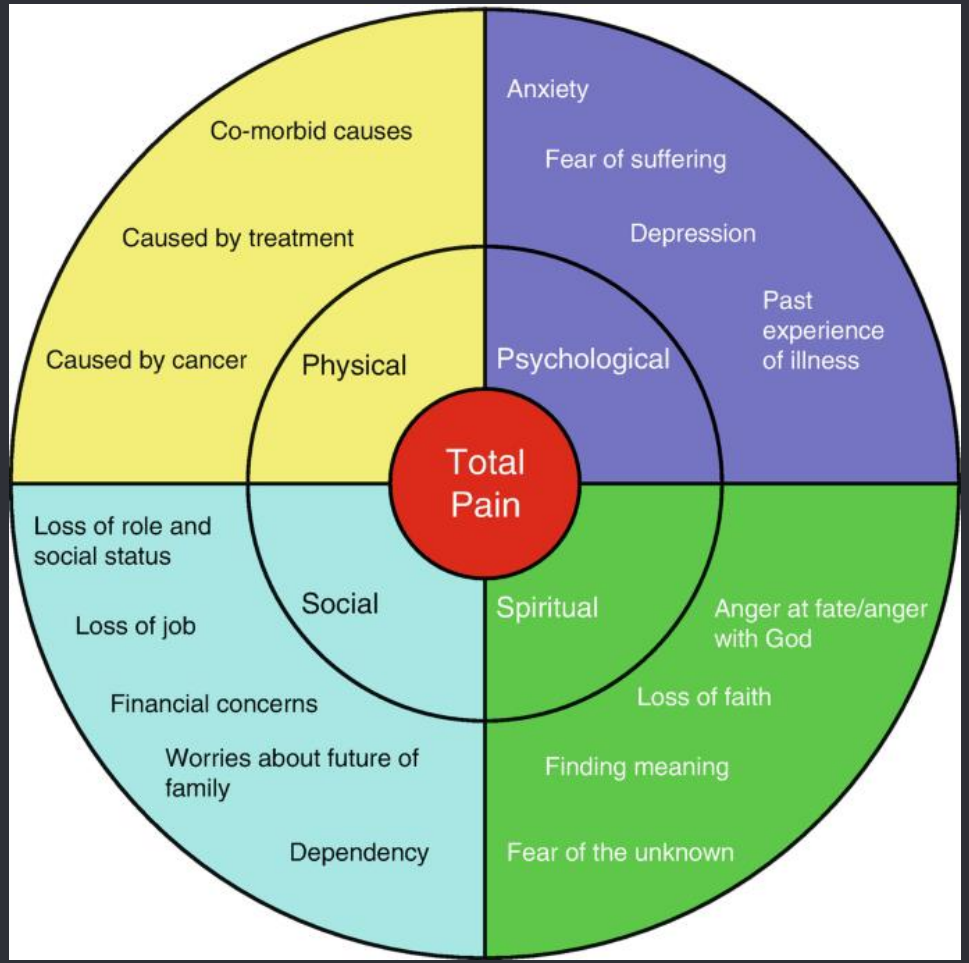
Drug	**Conversion ratio from oral morphine**	**Equi-analgesic dose to 30 mg oral morphine**	**Example conversions** *(These apply to single doses or total daily dose)*
Morphine (oral)	**1**	**30mg**	1. To convert 60 mg of oral Morphine to subcutaneous Morphine divide by 2 to give 30 mg. 2. To convert 30 mg of oral Morphine to oral Oxycodone divide by 2 To give 15mg
Morphine (sc)	**2 to 1**	**15mg**	
Morphine (iv)	3 to 1	10mg	
Diamorphine (sc)	3 to 1	10mg	
Oxycodone (oral)	1.5-2 to 1	15-20mg	
Oxycodone (sc)	3 to 1	10mg	
Alfentanil (sc)	30 to 1	1mg	
Fentanyl (sc)	150 to 1	200mcg	
Hydromorphone (oral)	7.5 to 1	4mg	
Hydromorphone (sc)	15 to 1	2mg	

Different aspects of palliative care

Opioid	Renal impairment		Hepatic impairment	
	Moderate	Severe	Moderate	Severe
Morphine	Reduce dose	Avoid	Normal dose	Reduce dose
Diamorphine	Reduce dose	Avoid	Normal dose	Reduce dose
Oxycodone	Reduce dose	Avoid	Reduce dose	Avoid
Alfentanil	Normal dose	Normal dose	Normal dose	Reduce dose
Fentanyl	Normal dose	Normal dose	Normal dose	Reduce dose
Methadone	Normal dose	Normal dose	Normal dose	Reduce dose
Hydromorphone	Reduce dose	Reduce dose	Reduce dose	Avoid
Buprenorphine	Normal dose	Normal dose	Normal dose	Reduce dose

Total Pain

Cicely Saunders, the founder of the modern hospice movement, recognized this and applied the term **total pain** as having **physical, psychological, social, and spiritual components interacting upon one another.**



Total Pain

The interaction among **total pain** components is often complex, yet evident in patients with serious illnesses. For example, loss of hope can have a spiritual, existential, and psychological dimension which may compound the intensity of physical pain if the patient attributes pain with impending death.

Clinicians cannot fully care for patients with life-limiting illnesses without assessing for all domains of total pain. Since no one person or discipline can manage total pain, interdisciplinary teams (IDTs) are vital to address **total pain**.

Total PainComponent	Description	Manifestation	Example	Intervention towards resolution
Physical	Nociceptive, visceral, or neuropathic pain from known tissue injury (1)	Pain leads to impaired function and social isolation from fear of exacerbations away from home	Epigastric pain radiating to the back from unresectable pancreatic cancer	Celiac plexus block significantly improves patient's pain and function (17).
Psycho-logical	Anxiety, hopelessness, helplessness from medical uncertainty (15,18).	Adjustment reactions, despair.	Disengaging from clinical care plan, spending excessive time searching the web	Meeting with the IDT for a serious illness discussion addressing what to expect and how the patient defines quality of life.
Social	Fear of dependency on family; loss of role as provider to family (19);	Loss of dignity and sense of worth (13).	Family conflict as the patient declines recommended care and voices an urgency to return home.	Facilitate discussions between patient and caregivers to help find solutions for the patient's changing clinical status and family role (2).
Spiritual	Despair from inner realization that life is finite and without meaning (16)	Feelings of disconnection and abandonment by community/God.	Questioning the meaning of life and the dying process – "*Why me?*" (20)	Involve clinicians (e.g., social worker, psychologist, chaplain) with skill sets to enable exploration of the patient's distress from dying (21).

Addressing spiritual needs:

- Don’t wait until the last minute!
- Facilitate rituals
- Assist with funeral arrangements
- Implement cultural considerations (values, customs, behaviors and beliefs)

Supporting the Family:

- Address questions
- Provide information
- Give suggestions on how to support patient/resident
- Offer comforting items: chairs, tissues, drinks, etc.
- Offer interdisciplinary support

6 Case studies

Case study – Presentation

Mr. J, 69 y/o, father of four, with 1y history of stage IV NSCLC, is referred to ED with pneumonia. He is confused, hypoxic and tachypneic, and not responding to IV antibiotics. Family says “do everything”. He has no ACP.

Case study – Discussion

1. What is the likely prognosis? List the suggestive clinical features.
2. What is “ACP”, and why is it relevant here?
3. What is your immediate approach?
4. How would you clarify the goals of care?
5. Would you initiate CPR if he deteriorates?
6. What role can a palliative care team play at this stage?
7. When should you consider transitioning to a comfort-focused care plan?

7 References and additional resources

References and additional resources

The *Lancet* Commission on Palliative Care and Pain Relief—findings, recommendations, and future directions

Report of the *Lancet* Commission on the Value of Death: bringing death back into life

MJHS online continuing education material: Hospice & Palliative Care

Thank you for your attention!

ANY QUESTIONS?

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