

THE ROLE OF PALLIATIVE CARE IN THE CARE OF PEOPLE AFTER STROKE

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Disclosures

- None
- Colleague and collaborator A/Prof Brian Le (Melbourne Health)

Learning Objectives

- Review of the enablers, barriers, advantages and concerns related to the integration of stroke services and palliative care
- Review of the differing but collaborative roles primary and specialist palliative care may play following an acute stroke
- Update on the increasing involvement of specialist palliative care services following stroke
- Overview of prognostication following stroke incorporating the importance of communication and communication skills.

Learning Objectives (cont'd)

- Discussion of the complexities associated with treatment limitations following stroke including impact on mortality and surrogate decision-makers
- Review of common symptoms encountered by people and care-givers following stroke
- Update on important considerations when people are dying following a stroke.

Key Messages

- Palliative care principles and practices need to be incorporated into inter-disciplinary stroke care as some people will have palliative care needs following an acute stroke
- The majority of palliative care following a stroke will be provided by stroke service health professionals with back-up from specialist palliative care services
- The palliative care needs of people outside the acute stroke phase are numerous, important but under-researched
- Communication is the key

Mrs Kim

- 81 year old previously well mother of four from Korea.
- Well when seen at 10am however at 12pm found slumped on the toilet with no movement of left side
- Ambulance called and transferred to local emergency department – STROKE CALL.

- Mrs Kim lived with her daughter but was fully independent – “helps daughter rather than the other way around”
- Past history included HT and gastric cancer
- GCS 14. Dense L hemiplegia. No existing Advance Care Plan (ACP)
- CTB – large intra-parenchymal haemorrhage centred in R frontal lobe. Minor intraventricular extension

- Regular Allied Health input including speech pathology, physiotherapy and OT
- Able to follow commands and no gross language deficits
- Ongoing L hemiplegia. Needing full assistance with care needs
- “Very, very sad” – would not want to be dependent or go into nursing home

- Increasing hypoxia with episodes of haemoptysis, wheeze and tachypnoea
- CXR – right MZ consolidation
- Declined antibiotics and wanting comfort-based approach
- GOC changed to palliative approach and referral made to hospital consultation palliative care service

- As Mrs Kim deteriorated she experienced a range of symptoms including:
 - Pain
 - Itch
 - Nausea and vomiting
 - Upper airways secretions

- Mrs Kim died peacefully surrounded by her loving family 18 days following her ICH

Themes.....

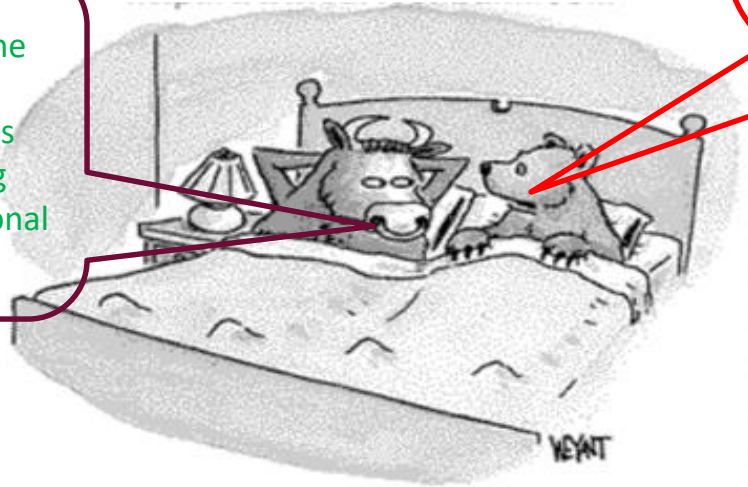
- Morbidity and mortality associated with stroke
- Primary palliative care & palliative care principles and practice
- Specialist palliative care involvement
- Prognostication
- Treatment limitation decision-making and associated complexities
- Symptom management
- End of life care

Stroke mortality/morbidity

- Remains a leading cause of mortality and morbidity worldwide
- Australia – 3rd leading cause of death for women and 4th for men in 2017
- 11-16% of patients died during acute care and 20% as result of stroke in first 30 days
- Differences between haemorrhagic and ischaemic strokes

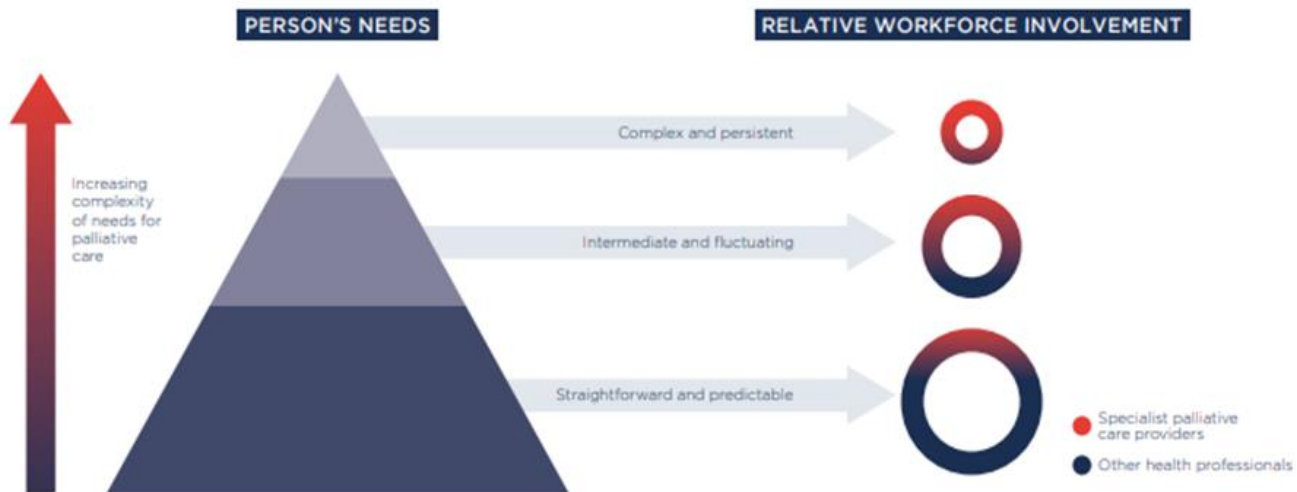
Stroke & palliative care integration

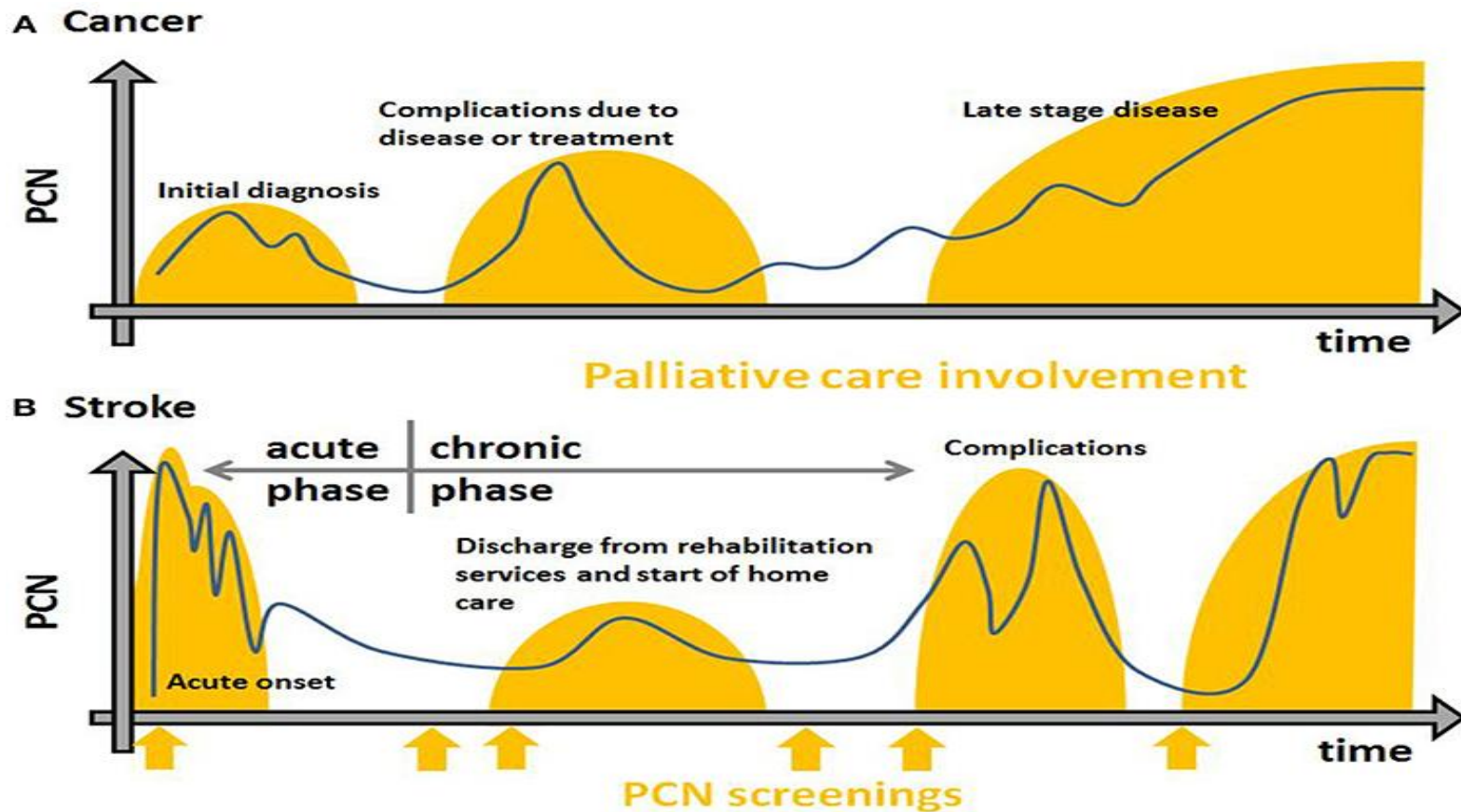
But my dear, there is increasing recognition of the relevance of palliative care principles for some patients following a stroke including within published international stroke guidelines.....



“we are a hyper acute stroke unit really trying to revive patients, not to go put on the end of life, it’s very difficult.....”
(Gardiner et al. 2013)

Figure 2.4: Alignment of need for palliative care against workforce capability





- Neuro –ICU Palliative care screening tool
 - Presence of distressing physical/psychological Sx
 - Specific social/support needs
 - GOC established
 - Disagreement between or within teams & families

Creutzfeldt et al. Crit Care Med 2015

- The Sheffield Profile for Assessment and Referral to Care (SPARC) identified as a valuable trigger for staff to consider range of palliative care issues

Burton et al. Age and Aging 2010

Specialist palliative care utilisation

- Increase in PC involvement for non-traumatic ICH from 4.3% in 2007 to 16.2% in 2011 (Murthy et al. Crit Care Med 2016)
- 2005 – 2007: 6.5% of 1551 stroke admissions at US teaching hospital (Holloway et al. J Palliat Med 2010)
- 2008: 11.4% of 544 admissions to an Australian tertiary metropolitan SCU (Eastman et al. BMJ Support Palliat Care 2013)
- 2014-2015: 27% of patients admitted to NICU with a stroke diagnosis at US quaternary centre (Williams et al. Am J Hosp Palliat Care 2019)
- 2014-2015: 44% of 123 stroke deaths in a large, tertiary hospital in Western Sydney, Australia (Quadri et al. Intern Med J 2018)

Who tends to be seen???

- Older
- Frailer
- Sicker

Table 3 Factors from multivariate logistic regression predicting palliative care service involvement for stroke care unit patients

	OR	95% CI	p Value
Preadmission mRS	1.28	1.06 to 1.55	0.010
Age	1.04	1.01 to 1.07	0.005
PICH	2.13	1.14 to 4.00	0.018

mRS, modified Rankin scores; PICH, primary intracerebral haemorrhage.

Eastman et al. BMJ Support Palliat Care 2013

- Stroke patients referred to SPC tend to:
 - Have longer length of stays
 - More likely to be transferred to PCU/hospice
 - More likely to go into residential aged care
 - Less likely to go to rehab

Prognostication

- Attempts to provide some degree of certainty while being at the same time inherently uncertain
- Multiple predictors used including:
 - stroke severity
 - stroke type
 - age
- Multivariate prediction models used and available

Communication

- Prepare for discussion
- Relate to person
- Elicit patient and caregiver preferences
- Provide information
- Acknowledge emotions/concerns
- Realistic hope
- Encourage questions
- Document
 - Clayton et al. Med J Aust 2007;186(12):S77
- Signposting
- ASK-TELL-ASK
- Checking & Chunking

Treatment limitations

- The majority of deaths after stroke follow either the limitation, cessation or foregoing of potentially life prolonging therapies
- Decision-making regarding limitations of treatment in acute stroke is complex and multi-factorial
- Treatment limitations can take numerous forms and may alter over time



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Symptom burden

- Physical and psychological symptoms are common following acute strokes
- Psychological symptoms appear to be common but there is variability in the literature
- The importance of considering psychological health has been highlighted by bereaved family members.

Variables	Stroke n (%) n = 1626	Cancer n (%) n = 1626	P-value	Odds Ratio (95% CI)
Presence of dyspnea	265 (16.3)	379 (23.3)	<0.001	0.69 (0.58–0.82)
No	1167 (71.8)	1158 (71.2)		
Do not know	194 (11.9)	89 (5.5)	<0.001	2.34 (1.80–3.03)
Fully relieved	74 (27.0)	126 (33.2)	0.151	0.77 (0.55–1.09)
Presence of death rattles	987 (60.7)	800 (49.2)	<0.001	1.70 (1.47–1.96)
No	574 (35.3)	792 (48.7)		
Do not know	65 (4.0)	34 (2.1)	<0.002	1.95 (1.28–2.96)
Fully relieved	417 (42.2)	341 (42.6)	0.873	0.98 (0.81–1.18)
Prescribed drug injection on demand	1345 (82.7)	1305 (80.3)	<0.017	1.25 (1.04–1.50)
No	247 (15.2)	300 (18.5)		
Do not know	34 (2.1)	21 (1.3)	0.080	1.63 (0.94–2.82)
Presence of pain	695 (42.7)	1268 (78.0)	<0.001	0.27 (0.23–0.31)
No	647 (39.8)	320 (19.7)		
Do not know	284 (17.5)	38 (2.3)	<0.001	8.84 (6.25–2.50)
Presence of severe pain, VAS >6 (in the whole group = 1626)	74 (4.6)	371 (22.8)	<0.001	0.15 (0.12–0.20)
Fully relived	556 (80.0)	894 (70.5)	<0.001	1.67 (1.34–2.08)
Prescribed drug injection on demand	1400 (86.1)	1535 (94.4)	<0.001	0.37 (0.28–0.48)
No	201 (12.4)	82 (5.0)		
Do not know	25 (1.5)	9 (0.5)	<0.008	2.80 (1.30–6.02)

doi:10.1371/journal.pone.0147694.t002

Eriksson H, Milberg A, Hjelm K, Friedrichsen M (2016) End of Life Care for Patients Dying of Stroke: A Comparative Registry Study of Stroke and Cancer. PLoS ONE 11(2): e0147694. <https://doi.org/10.1371/journal.pone.0147694>

End of life care

- Diagnosing dying is challenging
- A range of factors have been used to try and identify dying stroke patients:
 - stroke characteristics
 - clinical course
 - physiological parameters
- Two distinct temporal patterns of dying have been described
- Most people still die in hospital but perhaps this is changing???



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