Acute End of Life Care in hospitalised patients.

A/Prof Daryl Jones
Overview

• Trajectories of dying
• Dying in the intensive care unit
• Phases of end of life
• Overview of deteriorating patients
• The Rapid Response Team & end of life care
• Uncertainty and advancing technology
• Barriers to providing end of life care
• Potential solutions
Disclaimer

• Intensive Care specialist
• Research in deteriorating hospitalised patients (MD, PhD)
• Uni Melb & Monash Uni, advisor for ACSQHC
• Comments and opinions are my own
• May not represent my employer, societies, Universities, colleges with which I am affiliated
• Conflict of interest
  – Salary Melbourne public hospital for consultancy for deteriorating patients (<$10,000 over past 3 years)
  – Grant from ACQSHC ($70,000 – all went to study)
Trajectories of dying

Trajectory 1: Sudden death, e.g. acute MI, trauma

Trajectory 2: Short period of evident decline, e.g. cancer

Trajectory 3: Long-term limitations with intermittent serious episodes, e.g. organ failure

Trajectory 4: Prolonged dwindling, e.g. frailty and dementia

Dying in the Intensive Care Unit (ICU)

- Approximately 1/10 patients die
- Death is rarely sudden and unexpected
- The clinicians often predict in advance
- “Withdrawal of curative care” staggered
- ICU doctors
  - Good understanding of which patients will respond to artificial life support
  - Adept at communication about death and dying
Stephen Warrillow
KJ Farley
Daryl Jones

Ten practical strategies for effective communication with relatives of ICU patients

Ken M. Hillman
Magnolia Cardona-Morrell

The ten barriers to appropriate management of patients at the end of their life
When is death *not* unexpected?

- Prior to admission
  - Frail / needing supports
  - A lot of co-morbidity
  - Advanced organ dysfunction
  - A condition which has a known poor outcome
- At admission
  - Admitted with a diagnosis that has known poor outcome
- After admission
  - Not improving despite optimal treatment
  - Develop additional problems
Clinical Frailty Scale*

1. Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2. Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3. Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4. Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.

5. Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6. Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7. Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8. Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally III - Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.

* Canadian Study on Health & Aging, Revised 2008.
Trajectory 3: Long-term limitations with intermittent serious episodes, e.g. organ failure
Phase of end of life care

Palliative Care Service

Advance care planning

RRT / ICU

One year

Encounters with healthcare providers

Hospitalisation but return to independent function at discharge
Advance care planning

• Dr Karen Detering

Focus = patient value + choices
Acutely deteriorating patients

- In both cases
  - Right care
  - Right place
  - Right time

Hospital inpatient → Abnormal vital signs → Early intervention + Aggressive therapy → Avoid morbidity / mortality → Good symptom control & “spiritual care”, dignity → “good death” → Early recognition of dying and avoiding “non-beneficial therapies” → Reversible deterioration → Avoid morbidity / mortality → Early recognition of dying and avoiding “non-beneficial therapies” → Irreversible deterioration → Good symptom control & “spiritual care”, dignity → “good death”
Rapid Response Teams & End of life care

• Rapid Response Team
  – Senior / expert clinicians
  – Experienced at assessing deteriorating patients
  – Often from Intensive Care Unit
  – Called when a patient is deteriorating
    • Abnormal vital signs
    • Severe pain / problems breathing
    • Change in conscious state
MET
MEDICAL EMERGENCY TEAM

“MEDICAL EMERGENCY TEAM
AUSTIN HOSPITAL WARD .........”

Call 7777 state

if you notice any acute changes in

AIRWAY

- Obstructed airway
- Noisy breathing or stridor
- Problem with a tracheostomy tube

BREATHING

- Any difficulty breathing
- Breathing < 8 breaths a minute
- Breathing > 25 breaths a minute
- SpO2 < 90%, despite 10L/min oxygen

IF PATIENT IS NOT BREATHING, CALL RESPOND BLUE

CIRCULATION

- Pulse < 40 beats a minute
- Pulse > 120 beats a minute
- Low blood pressure (systolic < 90mmHg)
- Urine output < 50mls over 4 hours

IF PATIENT HAS NO PULSE, CALL RESPOND BLUE

CONSCIOUS STATE

- Sudden change in conscious state
- Patient cannot be roused
- Prolonged or uncontrolled seizures

OTHER

- Severe or uncontrolled pain
- Severe bleeding > 100mls/hr
- You are worried about an inpatient for any other reason

Austin Health
Original aim = prevent cardiac arrests / adverse events

Provide end of life care in hospital patients
Deterioration versus Dying

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Seven hospital study

• 7 centre study
  – Examined a number of LOMT (not just NFR)
  – Five Australian, one each Canada and Sweden
  – 652 RRT calls in 518 patients over one month
  – 68.9% for full care = in-hospital mortality = 12.3%
  – 31.1% of calls associated with a LOMT
    • 20.3% pre-existing before call
    • 10.8% newly implemented after RRT calls

1. Jones et al CCM 2012
• Differences patients with LOMT vs those without
  – Older (80 vs 66 years)
  – Medical patients (70.2% vs 51.3%)
  – Less likely to be from home (74.5% vs 92.2%)
  – Less likely to go home (22.4% vs 63.6%)
  – More likely to die in hospital (48.4% vs 12.3%)
The scale of RRT calls

- 10 year study 35 Australian hospitals
  - 4.91 million hospital admissions
  - 196,488 ICU admissions
  - 99,377 RRT calls.
- 70 924 RRT patients mortality = 24.3%
- RRT reviewed 17 260 of 79 476 patients (21.7%) who died in hospital over the study period

- Data from 2013/2014 Australian ICU-equipped hospitals
  - RRTs present in 138/143 (95.5%)
  - At least 92,858 RRT calls in Australia

Jones et al. CCR 2013; 15: 273
Strengths / limitations of this approach

• Advantages
  – Rapid symptom relief
  – Senior decision making
  – Clearer communication
  – Avoids “non-beneficial care”
  – If uncertain → “trail of ICU treatment”

• Disadvantages
  – Reactive approach
  – Family / parent unit may not be present out of hours
  – Patient unwell → variable participation in discussions
  – Decisions deferred to family / relatives
Uncertainty and improving technology

• In the past what could be offered was less
  – “Patient not strong enough for anaesthetic”
  – “Nothing more we can do”

• In 2015
  – People living longer
  – Available therapies broader
  – Surgical and anaesthetic technique improved
  – Intensive care can “prevent death”
Barriers to providing end of life care

• Uncertainty of
  – Prognosis
  – Response to therapy

• Patient / NOK / societal expectations
  – “Want everything done”
  – “Unrealistic expectations” – misleading TV programs

• Sub-optimal consideration of patient’s choices
  – “I don’t want to die on machines”

• Doctors not wanting to “fail”

Hillman ICM 2015
• Clinicians don’t appreciate disease in context of patient’s overall condition
• Lack of confidence / self-perceived competence in having discussion
• Perceptions of lack of time
• Deterioration often occurs out of hours
  • Least resources
  • Most senior doctors available are junior
• Multiple teams involved in one patient’s care
  – No one team taking overall responsibility about end of life care
## Table 1

**The four types of awareness of dying**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Closed awareness</strong></td>
<td>The patient is not aware they are dying but clinicians are aware that this is the case</td>
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<tr>
<td><strong>Suspected awareness</strong></td>
<td>Patient tries to find out if they are dying because they suspect that this is the case</td>
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<tr>
<td><strong>Mutual pretence</strong></td>
<td>Patient and staff do not acknowledge openly with each other that the patient is dying although both parties believe this to be the case</td>
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<tr>
<td><strong>Open awareness</strong></td>
<td>This is when the patient, staff, and family/friends can acknowledge, in their interactions with each other, that the patient is dying</td>
</tr>
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*Source: Glaser and Strauss (1965)*
Potential solutions

• Improved senior medical staff leadership
• CLEARx decisions
  – Consultant Leadership EOLC, ACP, Rx decisions
• Education clinicians
  – Especially doctors = starting at medical school
    • Comfort care = not failure
    • “A good death” = success
    • Communication skills
    • Start the conversation early in the course of decline
  – Nursing and allied health
    • Spend time with family / patient
    • Should contribute to discussion
• Coordinated response
  – End of life care coordinator
• Linking the RRT with palliative care
• Education community
  – Comfort in discussion of death and dying
  – Discussion about how and where they want to die
  – E.g. Charlie Corke
    • “In the end”
Summary

• Many patients have a predictable decline
  – Death and dying should not be a surprise
• Hospital clinicians often cannot diagnose “patient is dying”
  – May be left up to intensive care staff
• Several barriers to providing good end of life care
• Need for
  – Coordinated approaches – especially in hospitals
  – Education – clinicians and community
  – Increased comfort with talking about death and dying