Value-Based Care for the Seriously Ill Patient- Using a Home-Based Interdisciplinary Model

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Disclosures

- None

Objectives

- Recognize the challenges associated with caring for both chronically ill and aging populations
- Identify the role of Palliative Care in a home-based setting
- Demonstrate compassionate communication with patients and recommended interventions to enhance comfort and quality of life
Need

- Our population is aging, with new challenges and needs
- By 2050 the number of American’s older than 65 will double to 90M
- The sickest 5% of people account for 50% of the total healthcare spend
- The 40M family caregivers in the U.S. provide $470B of care annually, often with tremendous personal and financial sacrifice

Palliative Care

- Goal of palliative care is to relieve the pain, symptoms and stress of serious illness regardless of prognosis
- Improve quality of life and discussing goals
- Prevent further exacerbations
- Increasing functional status so patients can stay at home
- If possible improve life expectancy
Recommendation

- The American Heart Association recommends that palliative care should be integrated into the care of all patients with advanced cardiovascular disease to help relieve symptoms, improve patient satisfaction, reduce avoidable utilization and costs, and extend survival (Circulation 2016;134[11]: e198-225).
Chronic Disease

- WHO study estimates since 2002 chronic conditions account for 87% deaths in high-income countries
- Planning difficult
  - Complicated trajectories resulting in uncertain prognostication
  - Sudden deaths are common
  - Often survive many acute episodes
  - Public understanding of these diseases is not linked to dying (cancer) which can inflict negative reactions from patients
Chronic Disease

- Many treatment options and often no shared decision making with specialists
- Many therapies continued as they also impact quality of life even if they no longer impact quantity of life
- Advanced disease imposes significant physical, psychosocial and spiritual burdens on patients and their families

Figure 5. Trajectories of eventually fatal chronic illnesses. Source: Lynn and Adamson 2003.
Caregivers

- Caregiver burden in Oncology is often in the last 6 mo of life as patients stable with precipitous decline
- Chronic disease such as CHF and COPD require more caregiver support for a longer period of time due to early loss of functional status and inability to continue working

Holistic approach

- Comprehensive assessment of physical, psychological, spiritual and social needs is backed by robust evidence
- Requires a multi-disciplinary team
- Funding is an issue
AZPHC

- Interdisciplinary care
  - MD/NP
  - RN
  - MSW
  - Other- CNA, Volunteer etc
- Home based
- 24/7 RN support
- Goals of care

Approach

- Relieve symptoms
- Integrate psychological and social aspects of care
- Discuss goals and assist in shared decision making
- Provide support to families/caregivers during illness
Common symptoms

- Dyspnea
- Anxiety/depression
- Pain
- Asthenia
- Cachexia
- Cough
- Sleep disorders
- Cytokine excess?

Dyspnea

Pathophysiology
- Central and peripheral chemoreceptors
- Mechanical receptors in chest wall and respiratory muscles
- Vagal receptors in the airways and lungs
- Extrathoracic receptors on the face and in the CNS
Dyspnea

- Maximize inhaler therapy
- Treat reversible, underlying causes of dyspnea as feasible
  - Steroids and antibiotics
  - Pulmonary edema
  - Pleural effusions
  - Transfusions for anemia
Symptomatic Treatment

- Systemic Opioids are first line drug Tx
- Fans
- Interdisciplinary care

Opioid studies

- Currow DC. J Pain and Symptom Management 2011 Sep
  - MS SR 10 mg once daily, titrated (if improvement <10%) each week to maximum of MS SR 30 mg once daily (vs placebo)
  - 62% experienced >10% improvement
  - Low doses- 70% of patients at MS SR 10 mg once/day
  - Sustained benefit- 1 in 3 had benefit at 3 months
  - No respiratory depression or hospitalizations
Opioid Studies

- Abernathy, A BMJ. 2003 Sep 6; 327 (7414): 523-8
  - Double blind controlled cross-over trial/opioid naïve
  - Most had COPD
  - 4 days MS SR 20 mg once daily / 4 days placebo
  - 4 days placebo / 4 days MS SR 20 mg once daily
  - Significant benefits in dyspnea and insomnia in opioid group

Opioids

- Have not been shown to reduce SaO2, raise pCO2 or reduce RR
- Effect on dyspnea is not via reduction in RR
- In these studies the end point is subjective- quality of life
- Recommend low doses
Low doses

- Protocol by Rocker et al
  - Start with 1 mg PO Morphine/day
  - Increase over the first week to 1-2.5 mg Q4hrs
  - Increase by 25% weekly over next 3-4 weeks until dyspnea acceptable

Other options

- Simple fan works well
  - Minimal burden and cost
  - Unable to blind studies but have shown to be effective
- Supplemental oxygen in normoxic patients did not improve dyspnea more than room air delivered by nasal cannula
- Mixed, weak evidence for acupuncture
- Future research- Mindfulness/prayer?
COPD

- Depression as high as 40% among all stages of COPD and 62% for those patients on oxygen
- Anxiety as high as 19% in COPD and 75% in patients with severe airflow limitation
- Anxiety and depression lead to:
  - Increased frequency of hospital admission
  - Decreased quality of life
  - Early death

CHF

- 30-35% have clinical depression
- Correlates with higher symptom burden
  - Increased hospitalizations
  - Increased mortality
  - Less adherent to meds
- SSRI’s
  - First line
  - Induce fluid retention and hyponatremia
Holistic approach

- Pulmonary rehabilitation
  - No direct effect on the underlying physiologic derangements
  - Results in substantial improvements in:
    - Dyspnea
    - Exercise tolerance
    - Health status
    - Health care utilization
  - Likely addressing physical deconditioning and peripheral muscle weakness
- Psychosocial
- Benefits can last 1-2 years

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<thead>
<tr>
<th>Reckler et al.</th>
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<tr>
<td>Table 1. Features of pulmonary rehabilitation and palliative care</td>
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<td>Pulmonary rehabilitation</td>
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<td>Holistic approach</td>
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<td>Interdisciplinary approach</td>
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<td>Principles applicable throughout disease course</td>
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<td>Focuses on symptom management and QoL</td>
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<td>Is concurrent with restorative and life-prolonging care</td>
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<td>Psychological support</td>
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<td>Formal exercise training</td>
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<td>Promotes advance directives and decision making</td>
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<td>Spiritual dimension</td>
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QoL: quality of life, o: not typically a component of the intervention, ++: a typical component of the intervention, +++: a prominent component of the intervention, ++++: a very prominent component of the intervention.
Holistic approach

- An interdisciplinary palliative care intervention in advanced HF patients showed consistently greater benefits in quality of life, anxiety, depression and spiritual well-being compared to usual care alone.
- Although no change in hospitalization.
- No change in death rates.
  - Rogers et al. Palliative Care in Heart Failure.

Social determinants of healthcare

- **Financial insecurity, social isolation**, housing insecurity, addiction, transportation, health literacy.
- Survey - 68% of Americans.
- High-risk group showed 60% never discussed with their Provider.
- Only 22% would discuss with a Provider.
- 46% who are offered a program decline.
Baby Boomers

- Aging alone more so than any other generation
  - Prized individuality
  - Had fewer children
  - Ended marriages
- 1 in 11 age 50 older- lack spouse, partner or living child
- 1 in 6 live alone

Community

- Individuals with less social connection have:
  - Disrupted sleep patterns
  - Altered immune systems
  - More inflammation
  - Higher levels of stress hormone
- Social isolation increases risk of heart disease by 29% and stroke by 32%
- Social isolation accelerates cognitive decline
Loneliness

- Research shows loneliness takes a physical toll, including early mortality
  - Smoking 15 cigarettes/day
  - Consuming more than 6 alcoholic drinks/day
  - Worse than being obese or physically inactive
- People in poorer health are more likely to be lonely
- Loneliness costs Medicare 6.7 billion/year

Community

- Basic Science study
- Psycho-Oncology
  - Looked at social networks and Breast Cancer survival
  - The greater the social network the better prognosis
  - Small, less diverse social networks associated with more adverse lifestyle factors and less intensive cancer treatment
Financial insecurity

- Patients with serious illness
  - 25% unable to pay basic necessities
  - 53% use up their savings due to health costs
- More likely to discuss with clinical than insurance
- Team-based care in the home

Goals of Care

- SUPPORT trial
  - 23% discussed their wishes regarding CPR before hospitalization
  - Of those who did not discuss 58% said they were uninterested in discussing
  - But 87% of patients who had not or did not want to discuss their preferences wanted to avoid prolonged ventilation and 25% wanted to avoid resuscitation
Goals

- Asking what things in life are important to you correlated with 40% increase in patient satisfaction
- I want to talk to you about the care you would want if you became ill…
- Quality vs. quantity
- Hopes and Fears

Goals

- Under addressed by clinicians
- Open-ended questions
- Listening
Caregiver Responsibilities

- Caregiver Responsibilities and Support
- JAMA Internal Medicine 2016

Background

- Caring for an older adult can be time-consuming and stressful
- Number of people finding themselves as family and unpaid caregivers
- Med management, wound care, transport to MD visits, transitions, injections etc
- What are the caregivers’ experiences when caring for older adults in the community setting
Results

- 1039 caregivers cared for 1171 adults

Caregivers
- Mean age 57
- 69% female
- 41% high school educated or less
- 54% adult child
- 44.1% provided substantial help
- 29.8% provided some help
- 26.1% provided no help

Caregivers providing substantial help
- More likely to be female and adult children
- More likely to be older
- Live with that adult
- Less likely to rate own health as excellent or very good
- More likely to report emotional (1.8), physical (2) and financial (2) difficulties
- Were more likely to have restricting activities that interfered with hobbies/fun
- Had work productivity loss 3 times higher
- 45.5% were for dementia
Summary

- Quantifies the perceived financial and emotional burden for family and unpaid caregivers
- Invisible work
- CG not trained nor supported in their roles
- VA has caregivers program to pay and support eligible veterans
- Funding does not exist in current health insurance policies

Summary

- American health policies must catch up to support these caregivers
- “The new healthcare workforce”
- Burden will increase as baby boomers age and have declining health- will want at home
Bottom line

- Family caregivers have emotional and financial difficulties
- Increase as care burden increases
- Include family members in interdisciplinary care, establish partnerships
- Palliative Care must support and educate these members

References

References


References

References

- Small N, Gardiner C, Barnes S (2010) Using a prediction of death in the next 12 months as a prompt for referral to palliative care acts to the detriment of patients with heart failure and chronic obstructive pulmonary disease. *J Palliative medicine.*