HOSPITAL ELDER LIFE PROGRAM © 1999 (HELP): TRANSFORMING DELIRIUM MANAGEMENT

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OBJECTIVES

- The learner will describe the impact of delirium in older adults
- The learner will explain the major concepts and elements of the Hospital Elder Life Program ©1999
- The learner will paraphrase the impacted outcomes of the Hospital Elder Life Program
DELIRIUM

- Underrecognized, under documented
- Delirium complicates 20% of the hospitalizations of patient 65 years and older each year and occurs in 14%-56% of hospitalized older adults (Halter, Ouslander, Tinetti, Studenski, High, & Asthana, 2009).
- Delirium has a profound effect on patient mortality, and it was found that the one-year mortality rate after hospitalization with delirium is 35%-40% (Halter et al., 2009).
- One-year delirium health care costs are estimated at $143 - $152 billion nationally (Leslie & Inouye, 2011).
PRESENTATION OF DELIRIUM IN PATIENTS

- Acute onset and inattention
- Fluctuates throughout a 24 hour period
- May have difficulty with repetitive tasks
- Easily distracted
- Disorganized thoughts/ideas

- Impaired sleep-wake cycle
- Hallucinations
- Delusions
- Memory deficits/disorientation
- Psychomotor agitation
- Emotionally labile

HALTER ET AL, 2009
SIGNIFICANCE OF DELIRIUM

- Potential to result in:
  - Depression, anxiety, PTSD
  - Increased risk for falls
  - Increased risk for pressure injury
  - Increased morbidity and mortality
  - Increased length of stay
- Not as likely to be discharged to home
- Often underdiagnosed

LEGRAND, 2012
CONFUSION ASSESSMENT METHOD

- Presence of 1 **AND** 2 **AND** 3 **OR** 4
  - Acute Onset/Fluctuating Course
  - Inattention
  - Disorganized Speech
  - Altered Level of Consciousness

EVALUATION/TREATMENT

- Look for an underlying cause:
  - Malnutrition/dehydration
  - Infection
  - Constipation
  - Vision/hearing impairment
  - History of cognitive impairment or dementia
  - Review medications/dosages
  - Other testing - Ex. ABGs, CT head, TSH, etc.
  - Withdrawal - ETOH, medication
WHAT IS HELP?

- Hospital Elder Life Program
- “A model of care to prevent delirium and functional decline in hospitalized older patients” (Inouye et al., 2000).

- The HELP was developed from different models of care such as geriatric consultative services and specialized geriatric hospital units with a goal to easier disseminate quality geriatric care throughout entire hospitals (Reuben et al., 2000).
HISTORY OF HELP

- 1993 by Dr. Inouye operationalized as HELP in 1999

- The HELP recommends the use of trained volunteers to provide interventions geared toward patient specific risk factors for delirium such as cognitive impairment, sensory impairment, dehydration, sleep impairment, and immobility (“What We Do”, 2017).

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PARTICIPANTS OF HELP

- Interdisciplinary roles:
  - Volunteers
  - Volunteer coordinator
  - Staff Nurses
  - Physical Therapists
  - Occupational Therapists
  - Speech Therapists
  - Geriatrician
  - Elder Life Nurse Specialist/Elder Life Specialist
  - Social Work/Case Management
- Patients and families
PATIENT ENROLLMENT CRITERIA

Inclusion criteria

• ≥ 70 years old
• Estimated LOS > 2 days
• At least one risk factor for delirium

Exclusion criteria

• Unable to participate with volunteer interventions (mechanical vent, inability to communicate, coma, severe dementia or psychiatric disorder)
• Isolation Precautions (to volunteer standards)
• Patient/family refusal
• Comfort care measures, end of life
• Combative/violent
• Estimated LOS < 2 days

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OUTCOMES FROM LITERATURE
PATIENT OUTCOMES

- ↓ Delirium incidence and severity
  - Boockvar et al., 2016; Chong et. al, 2013; Zaubler et. al, 2013
  - CAM, Delirium Index, Delirium Rating Scale

- Improvement in overall cognition
  - Boockvar et al., 2016; Huson et. al, 2016
  - Brief Interview of Mental Status, MoCA

- ↑ or maintained function
  - Boockvar et al., 2016; Chong et al., 2013; Chong et al., 2014; Huson et al., 2016
  - Minimum Data Set of Activities of Daily Living Scale, Modified Barthel Index, Functional Independence Measure

- ↓ Falls
  Meta-analysis concluded that falls can be significantly reduced by the use of multicomponent nonpharmacological delirium interventions (Hshieh et al., 2015).
SYSTEM OUTCOMES

- ↓ Readmissions
  - Rubin et al., 2017-
    - 17.2% relative reduction in 30-day readmissions rates (Rubin et al., 2017)
    - translate to 100 fewer readmissions during the 1 year in patients with HELP compared to control
    - Translate to Medicare savings costs

- ↓ length of stay
  - Huson et al, 2016; Zaubler et al., 2013
**FINANCIAL OUTCOMES**

- **Overall costs**
  - Rubin, Neal, Fenlon, Hassan, & Inouye, 2011
  - Approximately $7,368,549 financial return by preventing delirium and reducing length of stay, and creating bed availability
  - Approximately $1000 per patient

- **Costs related to delirium episodes**
  - Zaubler et al., 2013
  - $108,000 annually on one nursing unit

- **Sitter costs**
  - Caplan, 2007
  - 111 patients, savings of $121,425 per year
QUALITATIVE OUTCOMES

- Hospital Staff:
  - Increased job satisfaction
  - Decreased job stress
  - Perception that patients that have HELP appear to recover faster and have noticeable improvements in their mentation

- Patient and Families:
  - Impact on companionship and loneliness
  - Noticeable improvements cognition
  - Volunteers helpful when staff members were not available
  - Valued the early mobility interventions the most
  - Highly satisfied with their experience with HELP

HELP AT HFMH
DAILY ACTIVITIES

Patients screened
Within first 24-48hrs of admission
70 y/o and >, with LOS > 2 days and at least one delirium risk factor

Patients enrolled
Assign volunteers to patients to carry out interventions targeted at individualized delirium risk factor(s)
Patient and family notification of enrollment
Notify nursing staff of enrollment in program

Volunteer Interventions
Therapeutic Activities
Reorientation/Daily Visitor
Sleep enhancement
Ambulation/ROM
Visual aids, amplifying devices
Feeding assistance
Encouragement of oral hydration

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KEYS TO IMPLEMENTATION

- Know the need
- Obtain administrative leadership buy in
- Present supportive data outcomes
- Obtain grant/funding, budgeted FTEs
- Procure a strong volunteer service department
- Acquire interdisciplinary support

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PHYSICIAN ROLE IN HELP

Attending
- Review medication list
- Review orders for timing
- Geriatric vital signs
- Attend interdisciplinary rounds
- Communicate with staff

PCP
- Educate patients and families about delirium
  - How to prevent, understanding risk factors
  - What to look for
  - Prepare for hospitalization
- Review medication list
- Geriatric vital signs

<table>
<thead>
<tr>
<th></th>
<th>Geriatric Vital Signs</th>
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<tbody>
<tr>
<td>Cognition:</td>
<td>Nutrition/Hydration:</td>
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<tr>
<td>Psychoactive meds needed:</td>
<td>Bowel/Bladder:</td>
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<tr>
<td>Sleep:</td>
<td>Skin:</td>
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<tr>
<td>ADLs:</td>
<td>Emotional Health:</td>
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<tr>
<td>Mobility:</td>
<td>Social Issues for dc planning?</td>
</tr>
<tr>
<td>Sensory:</td>
<td>IADLs baseline for dc:</td>
</tr>
</tbody>
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HELP EXEMPLAR

- Age: 97
- Risk Factors:
  - Cognitive impairment
  - History of dementia
  - Mobility Impairment
  - Requires 1 person assist and assistive device
  - Vision Impairment
  - History of cataracts, glasses not available
  - Hearing impairment
  - HOH, son took hearing aids home
- Interventions
FOR MORE INFORMATION ON HELP:

- www.hopitalelderlifeprogram.org
- elderlife@hsl.harvard.edu


REFERENCES


