Managing Fall in the Elderly: Starting from a Fall Prevention Project in the Emergency Department

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Acknowledgement

- Miss Li Ping (DOM, UCH/AED)
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Content

Introduction

Literature Review

Fall incident analysis

Interventions

Impact of good fall prevention in ED on fall management in the elderly
United Christian Hospital (UCH)

- Kwun Tong, Kowloon East
- Hospital expansion till 2023
- AED attendances
  - 3rd largest
  - ~ 490 patient visits/day
Bomb!!
Incident Sharing

• M/83, CVA, DM, HT
• Fell with shoulder injury at home
• Initially on wheelchair
• Did not use wheelchair after consultation
• Fell on the way to X-ray
Bomb!!
Incident Sharing

- M/69, Alcoholism
- c/o Drunk, GCS 13/15
- Urinal offered for voiding
- Accompanied by son
- Stand to void
- Fell onto floor with Head Injury
Institutional liability

Prolong patient stay

Radiological Examination

Department/Hospital

Relatives
Significance of Fall Prevention in ED

• Patient safety

• Nurse sensitive quality indicators
  • Assessment
  • Communication
  • Health education
Brief Literature Review Findings

What are the solutions to the problem of patient fall?
Literature Review in Fall Prevention in ED

• Morse Fall Scale
  • Corporate recommended fall risk assessment tool
  • high specificity, low sensitivity in predicting patient fall

• Lack of reliable and valid fall risk assessment tools in ED

(Townsend, 2016)
Literature Review in Fall Prevention in ED

• Multifactorial fall prevention program reduced fall incidence

• No single intervention effective alone

• Inconclusive evidence for the effectiveness of most fall prevention approaches in hospitals

(Stern & Jayasekara, 2009)
## Literature Review in Fall Prevention in ED

<table>
<thead>
<tr>
<th>Items</th>
<th>ED in Australia (2011 – 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Rates</td>
<td>0.031 – 2.89</td>
</tr>
<tr>
<td>Mean age</td>
<td>50 years old</td>
</tr>
<tr>
<td>Mean time to fall</td>
<td>399 minutes</td>
</tr>
<tr>
<td>Common Risk factors</td>
<td>Altered mental status (Drunk), medication related, history of falls in previous twelve months, impaired mobility</td>
</tr>
</tbody>
</table>

(McErlean & Hughes, 2016)
Fall Rate in ED

Fall rate = \frac{\text{Total number of patients fall}}{1000 \text{ Patient Visits}}

- Depend on setting
- Depend on patient population group
Fall Rates in UCH AED

1ST Project
Severity Index of Fall Incidents

2012 2013 2014 2015 2016 2017
1.8 1.73 1.8 2.29 1.73 2.26
Fall Incidents Analysis
Fall Incidents 2016 – 2017 2Q

Time of Incident

P shift
57%
Fall Incidents 2016 - 2017

Location

- Cubicle: 50%
- Others: 36%

Images of different hospital locations.
Contributing Factors

• Mean Age: ~ 69
• Cognitive impairment
  
Active illness

Toilet related

Alcohol intoxication
Usual Practice

- Sharing of incident during shift handover + Incident reporting
- Report on fall rates during half year nurse meeting
- Orientation for new nurses

Observation ward

- Hospital Guidelines
- Fall risk assessment with care plan for patient at risk (Morse Fall Scale \( \geq 45 \))
- Nursing Audit
Interventions
CQI Team Formation

- Resources Person
- Frontline Leaders

Staff Engagement
Supporting Staff Engagement

總結

- 預防病人跌倒需要醫護團隊合作
- 照顧高跌倒風險病人需要高效溝通
Use of Multimedia: Short Video (~4 minutes)

6 TIPs to Prevent Patient Fall in AED

TIPS 3
As we cannot see through the curtain,
Always stay with the patient

Always remind them
be aware of fall risk,
consequence of fall.

Without a call bell,
How can I call for a urinal/bedpan?
Equip our staff with knowledge related to fall prevention

- Poster from P&O Department
- For staff & patient information
Fall Rates in UCH AED
Fall Incident Management Audit

- Facilitate incident analysis
- Review nurses’ performance in post fall management
- Period: Oct-2017 to Oct-2018

Staff Engagement
<table>
<thead>
<tr>
<th>S</th>
<th>Date of incident</th>
<th>Time of incident</th>
<th>Site of incident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O/EOW</td>
<td>Waiting Hall</td>
<td>Clinical Area</td>
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<table>
<thead>
<tr>
<th>B</th>
<th>Presenting Problem</th>
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</thead>
<tbody>
<tr>
<td>Fall Risk Assessment</td>
<td>At-risk, Not at-risk</td>
</tr>
<tr>
<td>(Morse Fall Scale $\geq 45 = \text{At-risk}$)</td>
<td>Accompanied, Not Accompanied</td>
</tr>
<tr>
<td></td>
<td>Bed Rail, No Bed Rail, N/A</td>
</tr>
<tr>
<td>Incident witnessed</td>
<td>Carer, Staff, Others</td>
</tr>
<tr>
<td>How was patient found</td>
<td>Carer, Staff, Others</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>A</th>
<th>Actions</th>
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</thead>
<tbody>
<tr>
<td>Show concern and attend to need: What patient intended to do when falling?</td>
<td></td>
</tr>
<tr>
<td>Explore why / what cause fall?</td>
<td></td>
</tr>
<tr>
<td>Assess conditional change &amp; Commence neuro-observation chart</td>
<td></td>
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<tr>
<td>Assess injury and perform wound management</td>
<td></td>
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<tr>
<td>Reporting the incident to</td>
<td>Case Doctor</td>
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<td>--------------------------</td>
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<tr>
<td>Clinical Area Nurse In-charge (B1 / C1 / U / OW IC)</td>
<td></td>
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<tr>
<td>AED Nurse In-charge</td>
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**Recommendation**

- Facilitate investigation or follow patient pathway after doctor assessment e.g. Arrange X-ray / CT / Admission, Administer pain medication, etc.
- Communicate to next of kin as early as possible
- Review fall risk & prevention measures, inform patient and relatives
- Ensuring ongoing monitoring depending on severity of falls
- Keep maintain clear documentation
- **Before transfer / discharge:**
  - Case handover to nurse of receiving unit. Provide fall prevention education to patients or relatives
- Report the incident by AIRs

Reference: Guidelines on Prevention & Management of Patient Fall (3rd ed.)

Recording Staff: ______________________

KG Chan v.20170403
Signage at venue of A-P nursing shift handover

Let patients and their relatives become aware of their fall risk!

Fall Risk Factors

✓ Cognitive Impairment
  Drunk, Dementia, Confusion
✓ Toileting
  Using Urinal, getting off bed to toilet
✓ Active Illness
  Unsteady gait, Pain, Drug effect
✓ Fall History
Transfer the Message: Be aware of fall risk!
Interventions at regular time intervals

The Forgetting Curve
Next Steps

- Orientation to New Staff
- E-learning
- Enhance patient rounding
How can emergency nurse contribute to fall prevention in the elderly?

what a great idea!
• Good awareness in fall prevention
  • Identify intrinsic factors of fall during triage assessment
  • Assess and modify extrinsic factors of fall
  • Specific discharge education

• Always include fall prevention during our nursing care for the elderly
Next Steps

• Explore care pathway for the elderly with high fall risk when they return to the community
References


Transfer the Message: Be aware of fall risk!

Your ED

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