Barriers to Early Mobilization in Critically Ill Patients

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Objectives

- To review what we know about the practice of early mobility
- To review the challenges in studying barriers
- To present our group’s data on barriers to early rehabilitation
Early Mobility

- Is safe and feasible in mechanically ventilated patients
- Improves functional status at hospital discharge
- Reduces duration of delirium
- Is cost effective

Bailey et al., Crit Care Med 2007
Morris et al., Crit Care Med 2008
Schweickert et al., Lancet 2009
Pohlman et al., Crit Care Med 2010
Lord et al., Crit Care Med 2013
We’re not doing enough mobility

Berney et al., Crit Care Resusc
None of these patients were mechanically ventilated.

We’re not doing enough mobility

Berney et al., Crit Care Resusc
We’re not doing enough mobility

<table>
<thead>
<tr>
<th>Level of Mobilization</th>
<th>Total (n = 775) (%)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Endotracheal Tube (n = 401) (%)&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining in bed&lt;sup&gt;d&lt;/sup&gt;</td>
<td>590 (76)</td>
<td>370 (92)</td>
</tr>
<tr>
<td>No mobilization</td>
<td>81 (11)</td>
<td>61 (15)</td>
</tr>
<tr>
<td>Turning in bed</td>
<td>342 (44)</td>
<td>224 (56)</td>
</tr>
<tr>
<td>Sitting in bed</td>
<td>167 (22)</td>
<td>85 (21)</td>
</tr>
</tbody>
</table>

*Nydahl et al., Crit Care Med 2013*
Physical therapy utilization in intensive care units: Results from a national survey

Katherine E. Hodgin, MD; Amy Nordon-Craft, MA; Kim K. McFann, PhD; Meredith L. Mealer, RN; Marc Moss, MD

• Automatic evaluation of ICU patients by PT at 1% of hospitals
• PT involvement highly impacted by admitting diagnosis (stroke, spinal cord injury, MVA vs. medical admission)

Hodgin et al., Crit Care Med, 2009
CHALLENGES IN STUDYING BARRIERS AND FACILITATORS
We lack a common language to describe barriers and facilitators

<table>
<thead>
<tr>
<th>Factor</th>
<th>Judging readiness to exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapy judgement of medical stability</td>
<td>93 (84)</td>
</tr>
<tr>
<td>Pain</td>
<td>68 (61)</td>
</tr>
<tr>
<td>Physician instruction</td>
<td>63 (57)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>54 (49)</td>
</tr>
<tr>
<td>Gut feel</td>
<td>43 (39)</td>
</tr>
</tbody>
</table>

Skinner et al., Physiotherapy, 2008
We can only identify barriers if we ask about them

Heavy focus in the survey literature on:

- Patient contra-indications
- Resources (providers, equipment)
We can only identify barriers if we ask about them.

Heavy focus in the survey literature on:

• Patient contra-indications
• Resources (providers, equipment)

Appleton et al., Int Care Soc 2011

Factors perceived to limit the provision of rehabilitation:

- Patient severity of illness
- Insufficient funding
- Sedation
- Insufficient equipment
- Lack of patient co-operation
- Insufficient ancillary staff
- Insufficient physiotherapists
- Problems setting MDT goals
What is “culture”?

Culture of early mobility in mechanically ventilated patients

Polly P. Bailey, RN, ACNP; Russell R. Miller III, MD, MPH; Terry P. Clemmer, MD

Transforming ICU culture to facilitate early mobility.

Hopkins RO, Spuhler VJ, Thomsen GE.
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Bridge the gap from barriers to change

- Identify barriers
- Identify strategy for change
- Implement change
A THEORY DRIVEN APPROACH
A Theory-Driven Approach

- Brings **common language**
- Improves understanding of **change mechanisms**
- Builds evidence base with stronger potential for **generalization** to different settings
- Encourages **broader view** of barriers and facilitators

*Grimshaw et al., Health Tech Assess 2004*
*Foy et al., BMJ Qual Safe 2011*
ICARUS – ICU REHABILITATION STUDY
Methods

• Conducted theory based, semi-structured interviews
• ICU clinicians across North American
  • Nurses, physical and occupational therapists, respiratory therapists and physicians
• Analyzed with theory-based approach
Domains

- Beliefs about consequences
- Optimism
- Beliefs about capabilities
- Social/professional role
- Skills
- Knowledge
- Behavioural regulation
- Emotion
- Social influences
- Environmental context and resources
- Memory, attention and decision processes
- Intentions
- Goals
- Reinforcement
Highlights

1. Social/Professional Role - “Role clarity”
2. Social Influences
3. Environmental Context and Resources - Coordination of the team
4. Patients as team members
It’s my job to identify candidates

So, as bedside nurse I’m responsible for assessing the patient to see if they are a candidate

~RN
It’s **my** job to identify candidates.

So I think my role is going to be in identifying who I think would with be a candidate..

~MD
Nearly every participant described this as his/her job.
It’s my job to set goals.

Well, it’s a collaboration between the physician and the nurse taking care of the patient

~RN
It’s my job to set goals.

I’m making my own individualized goals for that patient. I have the care plan in mind but I’m thinking about what I think is realistic for that person.

~PT
Lack of role clarity is a barrier to good care

- Conflict between team members
- Lack of ownership over task
- Lack of expertise in task
- Confusion in communication with families
Highlights

1. Social/Professional Role - “Role clarity”
2. Social Influences
3. Environmental Context and Resources - Coordination of the team
4. Patients as team members
Social Influences

Barrier

Facilitator
Social influences can facilitate early rehabilitation

I see what people are doing in other facilities and it’s really interesting and I think we can learn a lot from outside of our own little bubble here.

~PT
Social influences can be a barrier to early rehabilitation

There are a few physicians who are very against any movement out of bed before day five, for their own reasons.

~RT
Social influences can be a barrier to early rehabilitation

We have to be collaborative in order to be successful, so it’s just hard when people say, “No, I don’t like it.”

~PT
Social influences can come from families too.

The families are usually asking for it if they don’t see their family members getting mobilized.

~PT
Social influences can come from families too.

Our biggest pushback... is families being very scared that, you know, their relative who’s on a mechanical ventilator may have a disconnect or the tube may accidentally be dislodged.

~MD
Social Influences

Barrier

Facilitator
Highlights

1. Social/Professional Role - “Role clarity”
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4. Patients as team members
....I mean, sometimes it doesn’t work [because of] scheduling conflicts with physical therapy.

~RN
The problem is that it’s a multidisciplinary process so it does involve, you know, all the RTs, all the nurses, all the physios... To get everybody to organize to do anything is always a challenge.

~RT
Highlights

1. Social/Professional Role - “Role clarity”
2. Social Influences
3. Environmental Context and Resources - Coordination of the team
4. Patients as team members
Patient as “Recipient” of Care

Patient

MD

PT/OT

RN

RT
Patients are active “players in their own healthcare

Ultimately the choice is the patient’s and if he doesn’t wish to participate, every patient has the right to decline...

~PT
Patients are active “players in their own healthcare”

Having a daily sense of accomplishment … helps them with the motivation.

~RT
Patients are active “players in their own healthcare

If they’re not willing to move, then you’re not going to make them

~PT
FINAL THOUGHTS
Practical Tips

1. Define explicit roles within your team.
2. Examine “social influences” within your setting
   • Use the positive influences to your advantage
3. Develop a strategy for “co-ordinating” the team to deliver early mobility
Next Steps

1. Family’s role in early mobility?
2. Is our model for early mobility patient-centered?
Study Team

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