

# Interactive Early Rehab for Patients, Involving Relatives and Health Care Assistants

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## WHY?

- Service improvement project undertaken as part of an internal development course for Band 5 and Band 6 nurses.
- 25% of all ICU patients receive early therapy (Zanni et al., 2010)
- NICE (2017) Rehabilitation after Critical Illness in Adults guideline.
- Guidelines for the Provision of ICU 2019, Section 3.6 Rehabilitation.

- Rehab should be:
  - Started as early as possible
  - From admission-discharge
  - Provided by trained individuals
- Myopathy: side effect of CCU stay or delayed rehab
- Recovery: 18 months to 2 years

# CHALLENGES TO EARLY REHABILITATION

- Barriers linked to: Patient - Provider – Institution.  
(Parker et al., 2013)
- Reasons for not receiving therapy:
  - Over sedation and/or low level of consciousness
  - Lack of available or trained rehabilitation staff
  - Busy shifts

## IN ORDER TO OVERCOME THESE BARRIERS WE NEED:



- To create a culture that prioritises early:
  - Rehabilitation
  - Interdisciplinary coordination
  - Communication and teamwork

(Lee and Fan., 2012)

## AIMS

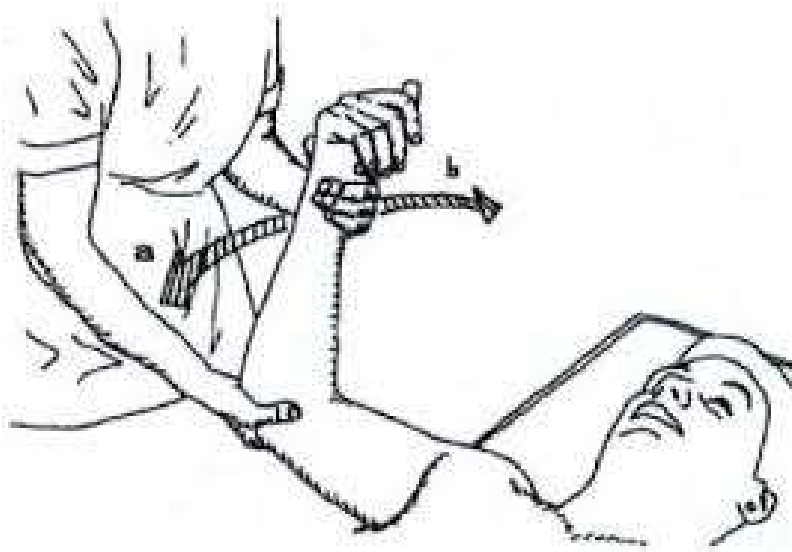
- Prevent myopathy.
- Promote human touch in the ICU by an interdisciplinary approach.
- Combine relatives and health care assistants' (HCA) input.
- Offer an additional role outside of their usual routine to HCAs.

# WHAT?

- Multidisciplinary collaboration
- PROM or AROM Exercises
  - a. Shoulder flexion
  - b. Shoulder abduction
  - c. Elbow movement
- Training from physiotherapists
- Trained relatives and HCAs



# Intervention: UPPER LIMB REHAB



- Individualised Upper Limb Rehab Plan
- Active / Passive Exercises
- Impairment based



# CRITERIA

## OF INCLUSION

- Patients / relatives willing to undertake rehab
- ICU patients from day 3 initially assessed
- Relatives willing to join in

- We identified a need for alternative resources for early rehabilitation.
- We sought advice from Physiotherapists and Occupational Therapists and received special training about PROM & AROM exercises.
- Presented rehab option to patients and their relatives.



# DATA COLLECTION METHOD

- Risk Assessment:
  - Past medical history
  - History of presenting condition
  - Review of current medications
  - Previous level of function
  
- Questionnaire for patients and their relatives:
  - Open and closed questions



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### Shoulder flexion

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**Therapist's aim**

To stretch or maintain range of the shoulder joint.

**Client's aim**

To stretch or maintain range in your shoulder.

**Therapist's instructions**

Position the patient in supine with their shoulder extended and elbow flexed a little. Move the shoulder joint to approximately 90 degrees flexion and back.

**Precautions**

1. Impaired or absent sensation of stretch.

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### Shoulder abduction

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**Therapist's aim**

To stretch or maintain range of the shoulder joint.

**Client's aim**

To stretch or maintain range in your shoulder.

**Therapist's instructions**

Position the patient in supine with their shoulder adducted and elbow flexed 90 degrees. Move the shoulder joint to approximately 90 degrees abduction and back.

**Precautions**

1. Impaired or absent sensation of stretch.

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### Elbow movements

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**Therapist's aim**

To stretch or maintain range of the elbow joint.

**Client's aim**

To stretch or maintain range in your elbow.

**Therapist's instructions**

Position the patient in supine with their arm extended. Move the elbow joint through full range of motion.

**Precautions**

1. Impaired or absent sensation of stretch.

# TEACHING CHECKLISTS

	M	T	W	Th	F	St	Sn
Teaching Done:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) Shoulder Flexion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Shoulder Abduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Elbow Movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching Done by:							
Teaching Done to:							

Suitable for Upper Limb Program

Approved by :

PHYSIO/ OT

# RESULTS

Number of patients	Patient suitable for ULE	Times performed	Times performed by relatives	Times performed by HCAs	Why ULE not performed	Other Comments
1	Yes	15	None	15	None	No relatives
2	Yes	20	20	None	None	Relatives preferred to do it
3	Yes	23	23	None	None	Family said movements are better
4	Yes	10	10	None	None	Patient passed away
5	Yes	18	18	None	None	Patient discharged to the ward
6	Yes	13	10	3	None	Patient said movements are better

Six patients were suitable for upper limb exercise this month

It was carried out 99 times

82% of it was carried out by relatives

18% was carried out by HCAs

# OUTCOMES OF PROJECT

- Multidisciplinary cooperation
- More patients get to receive rehabilitation
- Increase of patient's motivation
- Improved sense of “belonging” for relatives and HCAs
- More satisfaction and participation for relatives



# OBSTACLES



- Difficulty actualising the aim
- Awaiting and obtaining permission to start project
- Short timeframe

## OUR AIMS FOR THE FUTURE

- Family and HCAs involvement in rehabilitation exercises to become a routine aspect of care.
- Promote early reassessment and identify potential patients for early rehab.
- Suitability for rehab exercises to be added to the admission checklist.
- Patients identified for upper limb rehab exercises to be communicated amongst healthcare professionals thereby promoting continuity.

# CONCLUSIONS

- Relatives and HCAs can be a resource within Critical Care to assist with rehabilitation.
- Combined approach with the MDT and involvement of relatives helped with the coordination of rehabilitation.



**Any Questions?**

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