

An investigation into clinical reasoning within the context of critical care for cardiorespiratory physiotherapists using SimMan® (Laerdal™)

Submission date 23/06/2010	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 22/06/2011	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 07/03/2017	Condition category Respiratory	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title

An investigation into clinical reasoning within the context of critical care for cardiorespiratory physiotherapists using SimMan® (Laerdal™): a qualitative observational study using a mixed methods approach of video recording, thinking aloud and debrief interviews

Study objectives

The study will identify the clinical decision making process used by expert respiratory physiotherapists in the acute setting.

Ethics approval required

Old ethics approval format

Ethics approval(s)

School of Education Research Ethics Committee (University of Southampton), 21/12/2009

Study design

Qualitative observational study

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Post-operative respiratory complications

Interventions

This is an interpretive observational study using mixed methods of simulation: video, think aloud and debrief interviews.

A patient scenario will be designed and operated through the computerised manikin SimMan® (Laerdal™) at the VIP suite, Building 67, School of Health Sciences University of Southampton. The simulated scenario and environment will be set up to be as realistic as possible. A nurse will be present at the patients bedside and will be able to answer any questions about the patient and his care. The patient's notes and charts will all be available. The individual physiotherapist will be invited to assess the simulated patient and to form a problem list and treatment plan. This is anticipated to take as long as it would in clinical practise so approximately 20 - 40 minutes duration.

This will be followed by a debrief interview where the participant can view their assessment and can comment about their performance - approximately 20 - 30 minutes.

The data from the video, the think aloud and the debrief interview will be analysed using content analysis to find if there are any common themes between the participants.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Create a realistic simulated critical care scenario, using anonymised real patient data. The scenario has been written - pilot study to take place on July 16th, 2010.
2. Observe and record the clinical decision making processes used by expert physiotherapists. First set of data to be collected 26th, 27th, 28th July 2010.
3. Identify the knowledge, skills and behaviour of the decision making process of expert physiotherapists in a simulated critical care environment. This will be interpretive from the three sets of data - video, think aloud and debrief interviews. Measures will be taken to verify the reliability the assessment by the participant in the debrief interview, intra-reliability measures will be taken to ensure that each set of data is categorised in the same way in the content analysis.

Key secondary outcome(s)

1. Produce a conceptual framework of the clinical decision making used by expert physiotherapists when assessing and treating the critically ill patient. This will be produced when all 10 participants, data has been collated and analysed - September 2012.
2. From the conceptual framework produce an educational strategy for teaching clinical decision making in critical care. At the end of the study - December 2012 - the video clips will be embedded into power point and modified to use the audience response system so as to facilitate clinical reasoning with undergraduate (UG) students.

Completion date

26/01/2012

Eligibility**Key inclusion criteria**

1. Band 8, band 7, band 6 cardio respiratory physiotherapists working in critical care, intensive care units (ICU) or high dependency units (HDU)
2. At least 3 years clinical experience
3. At least 6 weeks recent experience in adult cardiorespiratory care
4. All participants must be familiar with working out of hours (twilight, on call, weekend rotas) and be managing independently their own caseload and making their own clinical decisions and willing and able to discuss their clinical decision making
5. Average age between 25 - 45 years, either sex

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Physiotherapy students will be excluded as they are not yet working independently in this field
2. Any qualified physiotherapists who have not practised within the last 6 months in adult cardiorespiratory physiotherapy and have less than 3 years experience

Date of first enrolment

26/07/2010

Date of final enrolment

26/01/2012

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

School of Health Sciences

Southampton

United Kingdom

SO17 1BJ

Sponsor information

Organisation

University of Southampton (UK)

ROR

<https://ror.org/01ryk1543>

Funder(s)

Funder type

Research organisation

Funder Name

Physiotherapy Research Foundation (PRF) (UK) (ref: PRF/09/3)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes