The benefit of Kinaesthetics training for the nursing staff and the residents in a nursing home

Submission date	Recruitment status No longer recruiting	Prospectively registered		
23/09/2010		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
25/10/2010	Completed	☐ Results		
Last Edited	Condition category	Individual participant data		
18/12/2020	Other	Record updated in last year		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

The benefit of Kinaesthetics training for the nursing staff and the residents in a nursing home: A cross-over prospective explorative longitudinal study with quantitative and qualitative methods

Study objectives

Research questions:

- 1. To what extent do nurses develop their movement competences in the mobilisation of elderly residents?
- 2. How do nurses judge their knowledge, skills, application, motivation and benefits of Kinaesthetics?
- 3. To what extent is nurses goal oriented and individual movement support of residents detectable and how does this appear?
- 4. How do residents judge their safety, comfort and pain during the mobilization as well as their own participation in mobilisation?
- 5. To what extent does Kinaesthetics reduce nurses' subjective perceived physical strain during the mobilisation?
- 6. How do nursing teams experience the learning and conversion of Kinaesthetics in daily practice?

Ethics approval required

Old ethics approval format

Ethics approval(s)

The ethical review board of the cantons Basel Stadt and Basel Land approved on the 16th of September 2010 (ref: 224/10)

Study design

Quasi-experimental mixed-methods intervention study with pre-post test design

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Nursing home residents with movement impairments needing support by nursing staff

Interventions

Kinaesthetics is a resource-oriented learning system that is based on the theories of Feedback Control Theory and Behavioral Cybernetics.

Through self-experience with the own body as a pedagogic tool nurses learn to

- 1. interact effectively and resource oriented with residents
- 2. observe, perform and compare different transfer movements.

With this the participants gain the personal competencies necessary to attend to and to adapt their own motion when carrying out professional tasks so they are not injured. Therefore, health care personnel learn how to move with, rather than lift residents. Thus, the nursing staff supports the movement skills of the residents with the use of Kinaesthetics in their everyday working.

Duration of intervention:

Kinaesthetics basic course 4 days and practice counseling 1 day over 4 months.

10 months after basic course nurses get the Kinaesthetics advanced course 4 days over 4 months. Total duration of training is 9 days.

Research group members (added 03/11/10): Elsbeth Betschon Institute of Applied Nursing Sciences University of Applied Sciences St. Gallen Switzerland elsbeth.betschon@fhsg.ch

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Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Nursing staff:
- 1.1. Socio-demographic data:

Age, sex, education, profession, musculoskeletal disorders, recorded with questionnaire at baseline (T0)

1.2. Knowledge, skills, application, motivation and benefits of Kinaesthetics:

Questionnaire with different questions on knowledge, skills, application, motivation and benefits measured within one month after basic course (T1) and within one month after advanced course (T2).

1.3. Learning and conversion of Kinaestetics in the daily working routine:

Focus group interviews with questions on the importance of movement in nursing care, experience with the learning and the conversion of Kinaesthetics, measured within six months after advanced course (T3).

One Focus-group per unit = 3 groups

1.4. Movement competence:

The SOPMAS© Instrument (Structure of the Observed Patient Movement Assistance Skill) observes the nurses individual performance and learning in patient transfer tasks and patient participation in locomotion activities with 4 items: interaction, patients movement, nurses posture and movement, environment and auxiliary devices. The scale ranges from 1= no skills to 5= very good skills

Video recordings of two transfers of each nurses, e.g. bed-wheelchair/chair-bed, transfer in bed (positioning) will be recorded at the measurement points at the baseline before training (T0), within one month after basic course (T1) and within one month after advanced course (T2).

1.5. Subjective perceived physical strain:

Borg CR10 scale of perceived strain, with a scale from 0 = no strain at all to 10 = extreme strain

- 2. Residents:
- 2.1. Socio-demographic data:

Age, sex, movement problems, needed movement assistance, pain medication, participation in regular nursing home movement group, recorded with questionnaire at T0

2.2. Safety, comfort, pain and own participation during the mobilization.

Questionnaire: pain by scale from 0 = no pain to 5 = unbearable pain; safety from 0 = very unsafe to 5 = very safe; comfort from 0 = very uncomfortable to 5 = very comfortable; participation from 1 = very low participation to 5 = very high participation

Measurement points: immediately after every recorded mobilisation T0-T1-T2

2.3. Functional mobility:

The MOTPA instrument (mobility test for residents in acute care) observes the amount of assistance needed in 11 functional tasks, which includes

- 2.3.1. Lying in the bed: moving to the top, moving sideward, transfer from back to lateral position, transfer from lateral lying position to sitting on the edge of the bed
- 2.3.2. Sitting on the edge of the bed: moving forward, keep sitting position, stand up
- 2.3.3. Standing position: turning 180°, going backwards 3 steps, short walk (6 m), walk (30 m), sitting down

The mobility profile will be assessed from the same video recordings as above, at baseline (T0), within one month after basic course (T1) and within one month after advanced course (T2)

Key secondary outcome(s))

None

Completion date

31/12/2011

Eligibility

Key inclusion criteria

- 1. Nursing staff:
- 1.1. Participation in the Kinaesthetics training during the study
- 1.2. Signed informed consent
- 2. Residents:
- 2.1. Need help in moving
- 2.2. In a physical and mental condition to answer questionnaire
- 2.3. Can read and speak German
- 2.4. Capable of understanding the study information
- 2.5. Signed informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Other

Sex

Key exclusion criteria

- 1. Nursing staff:
- 1.1. Participation in Kinaesthetics training before
- 1.2. No signed informed consent
- 2. Residents:
- 2.1. No need for help in moving
- 2.2. Not in a physical and mental condition to answer questionnaire
- 2.3. Cannot read and speak German
- 2.4. Not capable of understanding the study information
- 2.5. No signed informed consent

Date of first enrolment

18/09/2010

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

Switzerland

Study participating centre Institute of Applied Nursing Science (IPW-FHS)

St. Gallen Switzerland 9001

Sponsor information

Organisation

Institute of Applied Nursing Science (IPW-FHS) (Switzerland)

ROR

https://ror.org/049bwzr51

Funder(s)

Funder type

Research organisation

Funder Name

Nursing Science Foundation Switzerland (Stiftung Pflegewissenschaft Schweiz) (Switzerland)

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?
<u>Protocol article</u>	protocol	31/05/2011	18/12/2020	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes