

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

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<b>Registration date</b> 25/10/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 18/12/2020	<b>Condition category</b> Other	<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**

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):

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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 Kinaesthetics 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

All

### **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

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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?
<a href="#">Protocol article</a>	protocol	31/05/2011	18/12/2020	Yes	No