

Increasing nurses' and nursing assistants' awareness of the importance of nutritional care for older adults with a snack-size learning intervention:

Development and first evaluation

### Disclosure sheet



**Conflict of interest** 

No









# Nurses' and nursing assistants' essential role in nutritional care



Among adults of 70 years and older malnutrition is a frequent, major, and complex problem, which is a risk factor for frailty

(Volkert et al., 2019; Dutch Malnutrition Steering Group, 2017)

✓ Hospital and home care nurses and nursing assistants have an essential role. in multidisciplinary nutritional care for older adults

(Cederholm, 2017; Dutch Malnutrition Steering Group, 2017; Kitson, 2013)

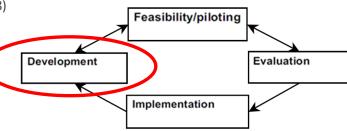
- ✓ They have moderate awareness and knowledge, mainly a neutral/negative attitude and give nutritional care low prioritisation (Bauer, 2015; Beattie, 2014; Boaz, 2013; Eide, 2015)
- Their behaviour needs to be changed and education seems a solid way to increase awareness, improve knowledge, and have impact on attitude and behaviour (Michie, 2014)

# Appropriate intervention development is important



- ✓ To increase the chance of successful development and implementation, and to strengthen validity
- ✓ Participation of its users
- ✓ Fit of the intervention into nursing practice
- ✓ Guidelines of development and evaluation of complex interventions of the

Medical Research Council (MRC) (Craig, 2008)



### Take into account:

- ✓ work environment: high workload, little time (Hegney, 2018)
- ✓ transferability of education to the workplace



(Holton & Baldwin, 2003)

# Aim study



- ✓ Development of a self-assessment educational intervention for hospital and home care nurses and nursing assistants to increase their awareness of the importance of nutritional care for older adults
- ✓ First evaluation of the educational intervention:
  - ✓ experiences with the intervention
  - √ the degree of learning
  - ✓ the transfer of learning to behaviour in the workplace

# Study methods: development

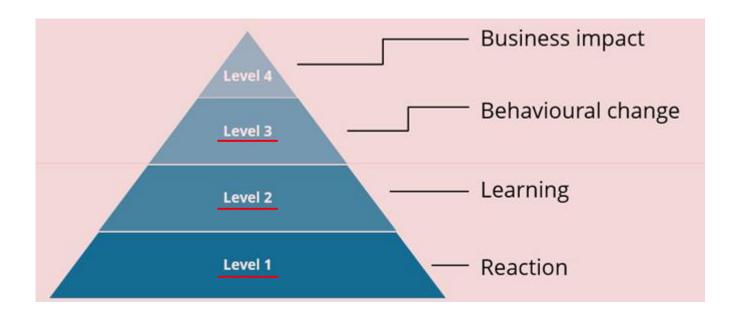


- ✓ Based on five principles regarding learning:
  - 1) interaction between intervention and users
  - 2) targeting users on both individual and team level
  - 3) supporting direct and easy transfer to the workplace, and continuous learning
  - 4) facilitating learning within an appropriate period
  - 5) fit with the context (Anderson & Krathwohl, 2001; Chiaburu, 2005; Michie, 2014; Hegney, 2018; Holton & Baldwin, 2003)
- ✓ Development of statements and corresponding explanations about nursing nutritional care for older adults in the hospital and home care setting
- ✓ Taking into account: 1) provider, 2) mode of delivery,
  - 3) intensity and 4) duration (Hoffman, 2014)

# Study methods: evaluation



Three levels of Kirkpatrick's model of training evaluation (Kirkpatrick, 1959; Kirkpatrick, 1994)



- ✓ Self-reported questionnaire
- ✓ Focus groups with nurses and nursing assistants
- ✓ Participant observation in the workplace
- ✓ Client/patient records

### Results: development



### Development of statements and corresponding explanations

#### Step 1

Conceptual model: generating themes

- -Literature
- Identifying relevant themes
- With experts (n = 6)
- Validating themes
- Formulating additional themes
- Consensus about themes
- With researchers (n = 3)
- Consensus on all suggested themes

#### Outcome

- Four main themes about nutrition in older adults Complemented by
- Three themes relating to behaviour of nurses and nursing assistants
- Three themes relating to nursing

#### Step 2

Conceptual model: generating statements - With researchers (n = 3)

### Based on the generated themes:

- -From literature
- Cases provided by experts from step 1
- From previous studies conducted for problem identification and definition

#### Outcome

Set of 52 statements reflecting the conceptual model

#### Step 3

Content validity and language

Round 1: with experts (n = 7)

#### Outcome

- 12 statements with I-CVI < .78 excluded
- Set of 40 statements with I-CVI ≥ .78 for round 2
- Round 2: with expert (n = 1) and researchers (n = 3)
- 40 statements from round 1 - Re-evaluation 4 statements with I-CVI < .78 from
- 2 new statements added

#### Outcome

round 1

-31 statements with good content validity and clear language

#### Step 4

#### Formulation explanations

- With researchers (n = 3)
- Formulating explanations
   Consensus on comprehensiveness, unambiguity
   and readability

#### Outcome

Formulation explanations corresponding to <u>31</u> statements

#### Step 5

Readability and face validity

Round 1 (statements): with target population (n = 12)

#### Outcome

31 statements with sufficient readability and face validity

Round 2 (statements and explanations): with experts (n = 2)

#### Outcome

31 statements and explanations with good readability and face validity Round 3 (statements and

Round 3 (statements an explanations): with researchers (n = 3)

#### Outcome

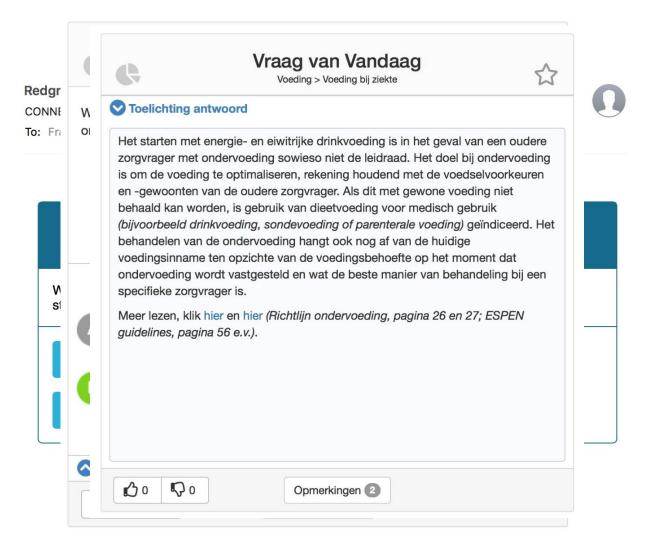
30 statements and explanations included in intervention

(ten Cate et al., in preparation)

- √ 30 statements and corresponding explanations about nursing nutritional care for older adults
- ✓ Online platform Redgrasp:
  - ✓ Daily learning with 'Today's question'
  - ✓ Snack-sized learning: one statement a day, five times a week, total time frame of six weeks
    (Redgrasp, 2022)

# **Results: development**





### **Results: evaluation**



- ✓ 2 hospitals: 4 teams general wards and 1 team outpatient clinic
  - 2 home care organisations: 9 teams (total: 14 teams)
- ✓ Participants: nurses and nursing assistants (n = 306) (response rate 89.7%)
- ✓ Total fill in rate of 30 statements: 66.4%
- ✓ Median (Q1, Q3) score for completed statements was 23 (12, 28).

Self-reported questionnaire for evaluating the intervention:

- $\checkmark$  n = 94 (response rate 30.7%)
- ✓ Experience:
  - ✓ Positive: satisfied (66%), fun (12.8%), refreshing the topic (17%)
  - ✓ Negative: formulation statements (22.3%), too much focus on hospital (5.3%)
- ✓ Learning: learning something new (over 69%), discussion (almost 42%)
- ✓ Changing behaviour: improving quality of care (71%)

### **Results: evaluation**



### Focus groups:

- ✓ 2 groups with total of 7 nurses and nursing assistants; duration approx. 1 hour
- ✓ Experience:
  - ✓ Positive: fun, competition, discussion, easy access, educational
  - ✓ Negative: digital problems, impossible to view answers > 1 time
- ✓ Learning: awareness, wrong answers, discussion, quick access to answers
- ✓ Change behaviour: in direct patient/client care, discussion, quality management of nutritional care

### Participant observation + client/patient records post-measurement:

- √ 5 nurses/nursing assistants; 12 patients/clients, home care and hospital
- ✓ No clearly detectable changes

### **Conclusion**



- ✓ Convenient and evidence-based intervention development
- ✓ Systematic and explicit development of 30 statements and corresponding explanations about nursing nutritional care for older adults
- ✓ Appropriate mode of delivery i.e. snack-sized way

- ✓ Mainly positive experience
- ✓ Confirmation learning and changing behaviour in daily practice when providing nutritional care to older adults
- ✓ Behavioural change is not visible in patient/client records or from observations

### Discussion and implication



- ✓ Actual knowledge
- ✓ Long term effect is unknown: attention and knowledge deteriorate over time and behavioural change is difficult (Chiaburu, 2005)
- ✓ Nursing nutritional care is a complex matter (Michie, 2014; Richards & Borglin, 2011)

- ✓ Usage of the educational intervention for developers of similar interventions
- Expansion use in nursing practice and education for nursing professionals and nursing students
- ✓ Enhancing nurses and nursing assistants to provide better nutritional care to (frail) older adults

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# Thank you for your attention







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