

# **Clinical decision making:** Fostering critical thinking in the nursing diagnostic process using a case study method



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NANDA 2008 Conference

# Presentation

- Background
  - Critical thinking and the Nursing Process
  - Classifications = Knowledge Base
  - Problems: Educational needs
- Research aims
- Case Study Method (CSM)
- Sample and duration of CSM
- Example CSM-Session
- Evaluation and Findings
- Discussion & Conclusions

# Background

- Clinical practice requires complex thinking processes
- Critical thinking is an intellectual, disciplined process of
  - active conceptualisation
  - application and
  - synthesis of information
- It is gained through observation, experience, reflection and communication and leads thinking and action (Paul, 1993)



# Background

Critical thinking influences all aspects of clinical decision making:

- a) diagnostic judgement
- b) therapeutic reasoning
- c) ethical decision making

(Gordon, 2004)



Human reactions are complex processes

Human behaviour is interpreted in the focus of health (Lunney, 1998; Webster 1984; Müller-Staub 2006)

# The nursing process (problem-solving)

Attention should be given to the nursing diagnostic process (Carlson-Catalano, 1998; Lunney 2007)

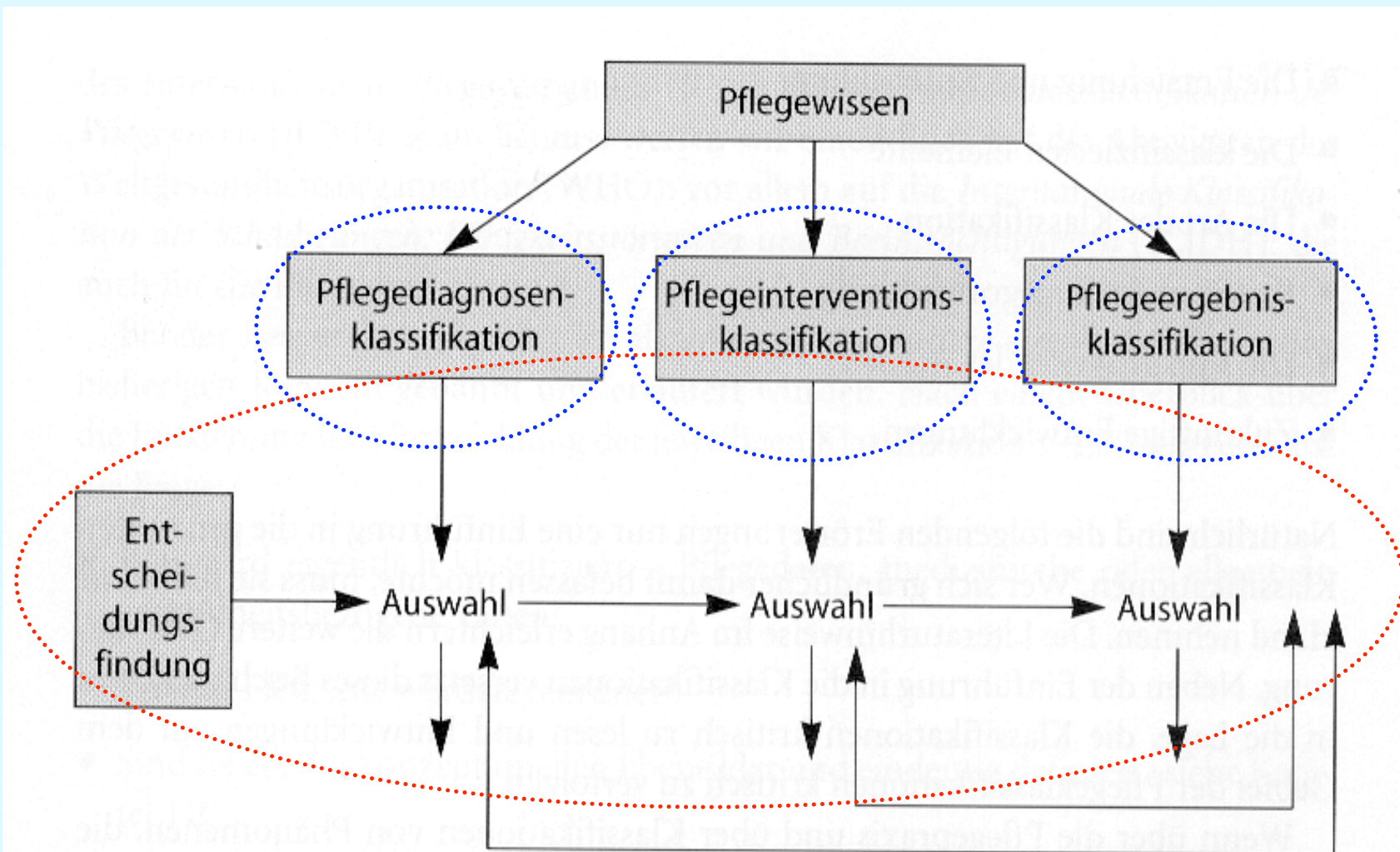
The nursing process includes

- stating nursing diagnoses
- choosing nursing goals/desired outcomes
- choosing nursing interventions
- evaluating diagnoses, interventions and outcomes



# Classifications = Knowledge Base

- **Nursing diagnoses (NANDA)**  
(impaired mobility, hopelessness)  
PES-Format
- **Nursing interventions (NIC)**  
(exercise therapy, hope instillation/self-modification assistance)
- **Nursing outcomes (NOC)**  
(enhanced ambulation, hope)



**Abbildung 5-1:** Das Pflegewissens- und Entscheidungsfindungsmodell (McCloskey und Bulechek, 1992)

# Problems

- Clinical decision making/critical thinking underestimated in school settings
- Research reveals nurses' educational needs
  - in clinical decision making/critical thinking
  - in use/application of nursing classifications

(Delaney, Herr, Maas, & Specht, 2000; Ehrenberg & Ehnfors, 1999; Müller Staub, 2007; Rivera & Parris, 2002)



# Research aims and methods

1. Development of a Case Study Method (CSM) to foster clinical decision making and critical thinking in nurses
2. Application of CSM in continuous education sessions
3. Evaluation of the effect of CSM by qualitative questionnaires

# Case Study Method (CSM)

## Aim

and to foster nurses clinical decision making and critical thinking skills

So that nurses can accurately assess patients' needs, choose accurate nursing diagnoses, interventions and outcomes based on NNN

# Case study method (CSM)

## Method

- Interactive, iterative hypothesis testing using actual patients' situations

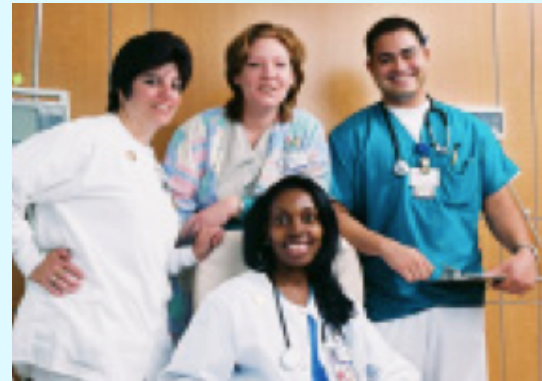
## Phases of CSM-Sessions

- Pre-phase
- Case selection phase
- Case delineation
- Case work
- Case evaluation

# Case study method (CSM) Example

## Phases of CSM-Session

- Pre-phase
- Selection phase
- Case delineation



# Case study method (CSM) Example

- Case work
- Case evaluation
  - nursing diagnoses (PES)
  - choosing nursing interventions
  - stating and evaluating nursing outcomes

(Müller-Staub & Stucker-Studer, 2007; Doenges et. al, 2003, 2007)

# Sample and application of CSM

Case study sessions were provided to

- 5 groups of nurses  
(n = 13-15; N = 72 nurses).
- 10 Sessions were provided over a duration of 1.5 years to all groups
- The duration of each session was 1/2 day

# Evaluation of CSM

- Qualitative questionnaires (N = 72)
- Containing nine semi-structured questions
- Analyses: Mayring's qualitative analysis approach
- Summarizing, rephrasing and categorizing findings
- Findings: Core themes

# Findings

## **Nurses' learning effects, thematically categorized:**

- Patients' problems were perceived more patient-centred
- Accurate nursing diagnoses were stated
- More effective nursing interventions were chosen and implemented
- Nurses improved communication skills and relationships with patients

# Findings

## **Patients' problems are perceived more patient - centred**

“I understand patient's situations in a more patient-centred way”

“I learned that standardized nursing diagnoses are formulating the patients problems in his/her perspective”

„ My care plans show more specific patient problems, described in the patients perspective“

# Nurses' learning effects

## Accurate nursing diagnoses are stated

“I learned to state accurate diagnoses, based on corresponding signs/symptoms and related, etiological factors”

“I know and can differentiate between nursing diagnoses”

“My care plans contain exactly stated nursing diagnoses in PES”

“I state accurate, individual nursing diagnoses in care plans, containing signs/symptoms and related factors”

# Nurses' learning effects

## More effective nursing interventions are chosen

“Hypothesis-testing rounds helped me to differentiate nursing diagnoses and to search specific nursing interventions”

“I choose more specific interventions”

“I learned to appreciate and implement *effective nursing interventions*”

“My view about nursing and interventions has broadened, I now choose more and *different nursing actions, such as active listening, comfort-giving*”

## **Nurses' learning effects**

**Nurses improved their professional relationships and enhanced their communication skills and caring behaviour**

“I became aware that I got a better understanding of patients' situations - I'm stepping into their perspective, and I'm more reflecting my care given”

“I enhanced my communication skills and caring behaviour”

“I consciously seek better professional relationships with patients”

“By using CSM, I became more sensitive to listen/observe to patients' cues, hints and what they say - verbally and non-verbally”

# Discussion / Conclusion

Other studies confirmed: CSM fosters Critical thinking and Clinical Decision Making

Using NNN helps to accurately state nursing diagnoses and to choose effective interventions

*We recommend CSM combined with implementing standardized Nursing Classifications (NNN, Doenges et.al)*

*Thank you!*

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