Collaborative interprofessional problem solving in case discussions and

in case discussions and simulated ward rounds

Hartmann D^{1,2}, Dimitriadis K^{1,3}, Musäus P⁴, Fischer MR¹

- 1 Institute for Medical Education (DAM), LMU Klinikum, Munich
- 2 Psychiatry and Psychotherapy, Faculty of Medicine, University of Augsburg, Bezirkskrankenhaus Augsburg
- 3 Department of Neurology, LMU Klinikum, Munich
- 4 Centre for Educational Development, Aarhus University, Denmark

Background

- In patient care, information sharing and communication with the patient and within the team is an essential component of optimal and good patient care³
- Few theoretical constructs for observable aspects of these interprofessional scenarios. There is some evidence for better team outcomes for the Liu et al. model => transferability to medicine?
- Basis is a theoretical framework developed in Munich with international researchers⁶.

Aim and research questions

The purpose of this study is to provide a possible description of ward rounds and case discussions with observable collaborative activities between nursing and medical students.

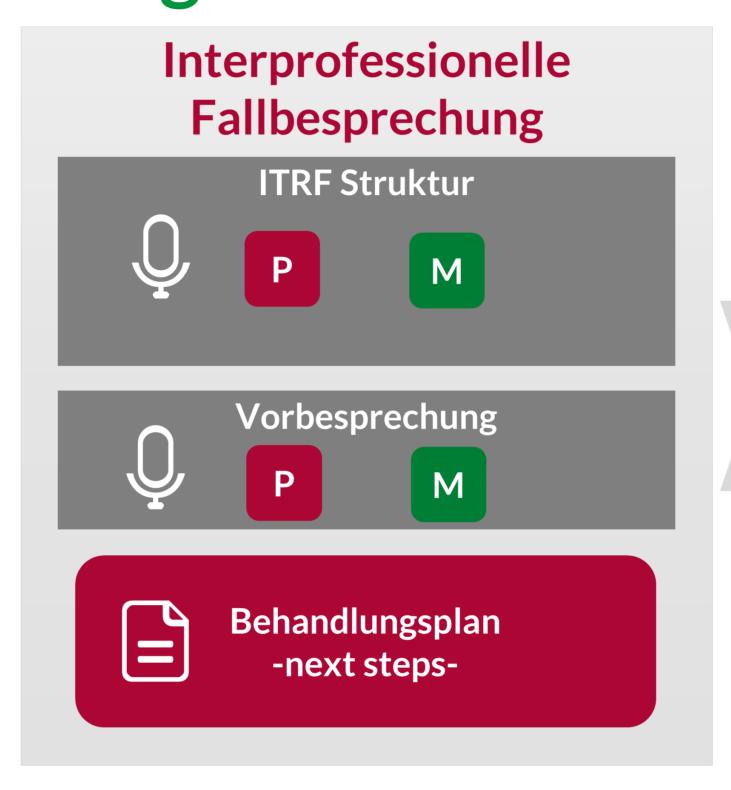
- 1. Which collaborative activities related to the conceptual framework according to Witti et al. are found in the context of an interprofessional case discussion and in which frequency distribution?
- 2. Which collaborative activities related to the conceptual framework are found during an interprofessional simulated ward round and in what frequency distribution?
- 3. Do common or different patterns emerge in the distribution of observed collaborative activities among nursing and medical students?
- 4. What complementary codes can be found to the existing Liu et al. subcode category system?

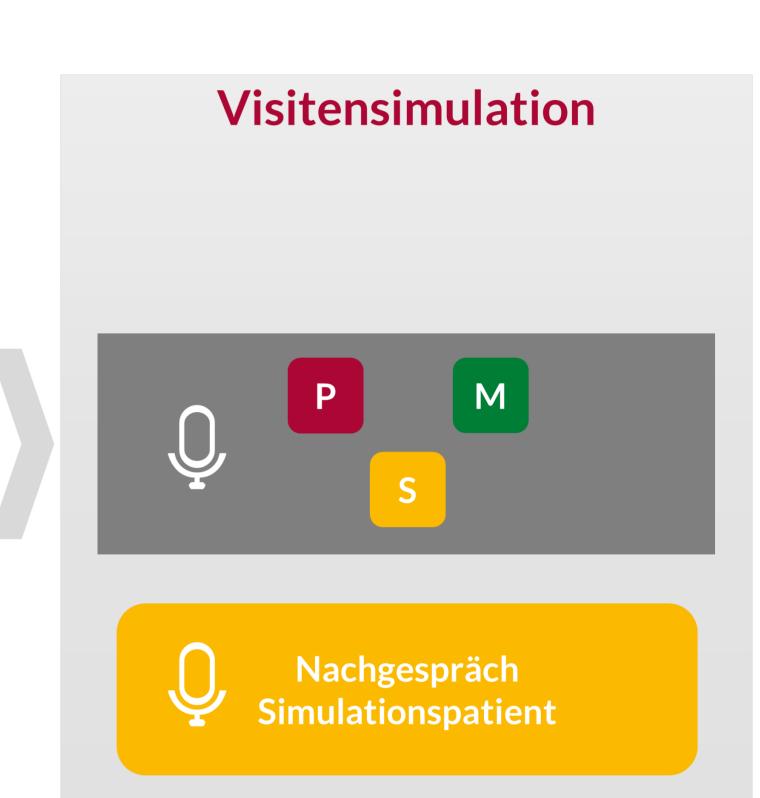
Intermediate evaluation

(coding of 22 case discussions until now)

Information sharing and grounding	395
Negotiating for collaborative knowledge construction and collaborative activities	824
Clarification of objectives / joint evaluation and confirmation	377
Maintaining interprofessional communication	76

Design





ILEGRA

The last course unit of "FInKo" was used for data collection⁵.

In total, the data consists of 25 runs.

The course was conducted entirely online.

Data collection was mostly conducted synchronously in the last of the 5 units (3 tandems recorded in parallel)

Methods

2 course runs for data collection: a total of **22 nursing and 19 medical students** in November 2020 - February 2021.

Students came from the Katholische Stiftungshochschule (ksh) and University of Applied Sciences Munich (HM) (nursing, approx. 4th year of teaching) and from Augsburg University Hospital (interns, approx. 12th-13th semester).

In each case, interprofessional tandems performed 1 case discussion followed by 1 interprofessional visit with 1 of 3 simulation patients (all used the same internal medicine case).

All recordings were transcribed and content-analyzed according to Kuckartz² using MAXQDA.

The framework according to Witti et al was used for the analysis. This includes 5 categories, partly based on Liu et al⁴. Liu published 33 subcategories¹. These were applied as a category system.

Outlook for the next steps

- Start of second coding with nurse and end of interrater coding
- Complete coding of all data from case reviews and ward rounds
- Analysis of data with MAXQDA
- First draft of the doctoral thesis to be sent to supervisors for correction
- Submission of the doctoral thesis and submission for examination, publication

until 06/2022

until 07/2022

until 08/2022

until 10/2022

until 01/2023

Resources

- 1. Hao, J; Liu, L; Davier, A. A. von; Kyllonen, P; Kitchen, C (2016): Collaborative Problem Solving Skills versus Collaboration Outcomes: Findings from Statistical Analysis and Data Mining.
- 2. Kuckartz, U (2018): Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung. 4. Auflage. Weinheim, Basel: Beltz Juventa
- 3. Langewitz, W; Conen, D; Nübling, M; Weber, H (2002): Kommunikation ist wesentlich Defizite der Betreuung im Krankenhaus aus der Sicht von Patienten und Patientinnen. In: Psychotherapie, Psychosomatik, Medizinische Psychologie 52 (8), S. 348–354. DOI: 10.1055/s-2002-33079.
- 4. Liu, L; Hao, J; Davier, A.A. von; Kyllonen, P; Zapata-Rivera, J-D (2016): A Tough Nut to Crack 23, S. 344–359. DOI: 10.4018/978-1-4666-9441-5.ch013.
- 5. Witti, MJ; Hartmann, D; Wershofen, B; Zottmann, JM (2021): Building interprofessional and interinstitutional bridges in health care education. Med Educ. 55(11): 1309-1310. doi:10.1111/medu.14615
- 6. Witti, MJ; Zottmann J; Wershofen, B; Fischer, F; Fischer M (2020): Ein Vorschlag für ein Rahmenkonzept zur Analyse und Förderung interprofessioneller kollaborativer Aktivitäten. Jahrestagung der Gesellschaft für Medizinische Ausbildung (GMA). Zürich. DocP-014

Contact: daniel.hartmann@med.uni-augsburg.de









