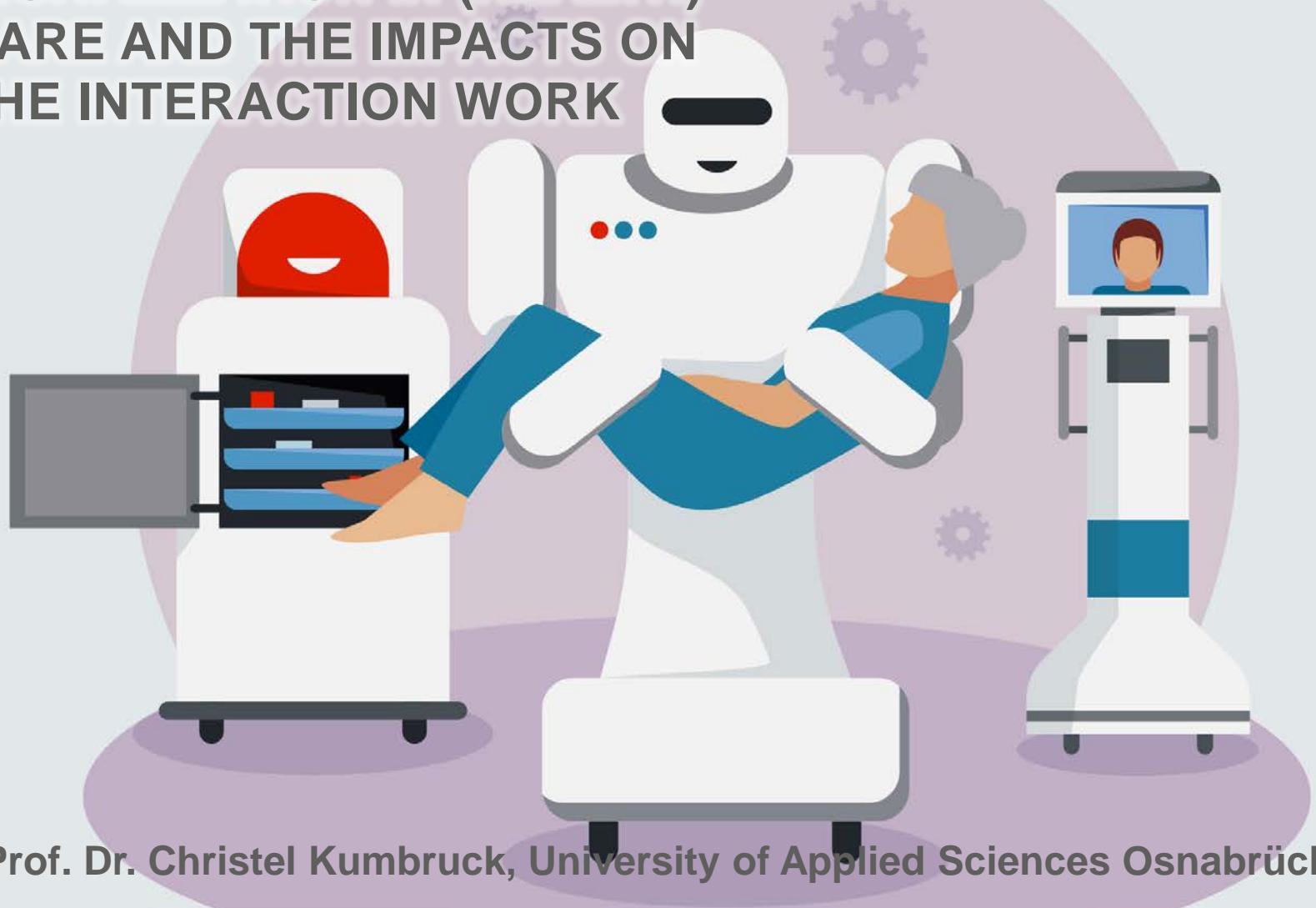




HOCHSCHULE OSNABRÜCK

DIGITALIZATION IN (HEALTH) CARE AND THE IMPACTS ON THE INTERACTION WORK



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risks and innovation impacts on employees' wellbeing

Presentation: Prof. Dr. Christel Kumbruck:
Digitalization in (Health) Care and the impacts on the
interaction work

01 CARING AND INTERACTION WORK

02 ROBOTS IN CARE WORK

03 WELL-BEING OF NURSES AND PATIENTS?

<https://www.youtube.com/watch?v=YWANBRMBjMk>



INTERACTION WORK IN NURSING

Interaction work characterizes the professional demands in service jobs: Especially in the personal services like nursing the object of the work is a human being, a subject which is an active part of an interaction. So it's difficult to predict the reactions of the care-receiver and plan the work and calculate the working time.

The concept of Interaction work does not deal with the “What” of the professional work, the working tasks and demands, but with the “How”, this means the working activities. (Böhle 2018)

Interaction work is not easy to observe; it deals with verbal and non verbal communication and emotions.

Interaction Work: Working on and with emotions

→ **Source of specific satisfaction and stressor for psychological strains**

1. **Emotions of the care-receiver as a work object**
2. **Own emotions as a condition**
3. **Emotions as means of work**



1. Emotions of the care-receiver as a work object

Influencing the emotional state of the communication partners positively in order to encourage and reach a certain goal
(sentimental work, Strauss et al., 1982)

Example: Trying to cheer up patients so that they cooperate

→ cooperation



Source: Strauss et al. 1982

2. Own emotions as a condition

Working on own emotions
(emotional labor, Hochschild, 1983)



Controlling of own emotions, suppression of emotions
e.g. getting over disgust or anger

Manipulation of own emotions, expression of emotions
e.g. show politeness when actually angering (emotional labor)

Coping with consternation, e.g. sadness when a patient dies

→ professional attitude

3. Emotions as means of work (Feeling)

“Instruments” of perception, realizing and understanding, empathy e.g. touching the skin and noticing the patients high temperature

Drawing by Stefan Nachreiner



To empathize: Getting insight into the feelings of the patient
e.g. patients with dementia

Situated action: Taking into account the context
e.g. to hand a glass of water to a patient who cannot move

→ Subject-subject-relationship

Since 2000 primacy of the economization of care sector

-> Short time of devotion works against care takers: in ambulant palliative care a nurse complains about the short time span she has to care for a patient: “Dying of a patient doesn’t work in 20 minutes”. -> no time for interaction work

Consequences in the professional care sector – less well-being:

- Higher illness-rates compared to other branches, especially muscle-skeleton and mental illnesses
- Shorter length of stay in profession (see Next Study)
- Health Care disgraces and scandals
- Lack of Health Care personnel



DIGITAL TECHNOLOGIES IN CARE

1. Digital Documentation (combined with electronic network)
2. Tele-Care
3. Digital assistance systems
4. Robots



EXPECTATIONS IN DIGITALISATION IN CARE

Release of “time consuming”, “stressful work” and so getting “free space for personal devotion to patients. So wishes for kindness, devotion and confidence building come into the main focus” (Schmidt-Rumposch 2018, S. 18), director of nursing at first Smart Hospital in Germany (Universitätsklinikum Essen).

Will digitalisation meet the expectations? Will there be more time for interaction work? Will there be more well-being of patients and of nurses? Let's have a look at robots.



ROBOTS: “AUTONOMY”

“an actuated mechanism programmable in two or more axes with a degree of autonomy, **moving** within its environment, to **perform intended tasks**. Autonomy in this context means the ability to perform intended tasks based on current state and sensing, without human intervention (according to ISO 8373) + **sensory + voice**

Applications in care institutions:

- Lot of prototypes, research
- Transport of bedding or medicine in hospital (RoboCourier)
- Lift and change positions of heavy objects, even patients (multi-functional lifts)
- Activities like feeding or shaving care receivers
- Robot Companions or Emotional Robots (e.g. Care seal Paro); Robot Pepper to support social activities, e.g. introduction and animation of Tai Chi, dancing, singing in groups in elderly homes.

Care with robots: interaction work in a triangular relationship?

FHNW and Kantonsspital Zürich develop an implementation scenario:
Robot Pepper caring for a patient with dementia

The nurse brings robot Pepper to patient Mrs. Sommer	Patient interacts with the robot and orders reading a book	Pepper is reading to the patient	Patient stops interaction "good night"; Pepper goes into surveillance mode	Patient awakes in confused, disoriented state	Pepper asks about the problem and sends an emergency signal to nurses	The nurse receives the signal on her smartphone	The nurse goes to patient, accompanies her to WC	Patient says good night and goes to sleep; pepper in surveillance mode	Patient is surveilled by Pepper
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ROBOTS POTENTIAL AND LOSSES FOR NURSES' WELL-BEING: HEALTH AND JOB MOTIVATION

- + Assistance Robots can reduce muscle-sceleton-diseases by heavy loads (overweight patients)
- + Social Robots can decrease the psychological burden of interacting with patients with dementia with repetitive demands.
- + Supervising Robots can decrease the psychological burden of responsibility for care receivers who need observation the whole day and night.
- ? The demonstrated scenario reduces the role of nurses to a monitor supervisor and emergency responder with interaction work. So do a lot of applications of care robots and assistance systems.
- ? If the time-reduction due to robot implementation cannot be used for time for interaction work, they do not built up ressources against stress like thankfulness and appreciation of care receivers or the feeling of doing senseful work they will suffer as much from psychological diseases like depressia or burnout as before.

Source: Merda et al. 2018

Care Crisis

Sharkey & Sharkey (2012, S. 288) suggest as a solution of the demographic change the “Elderly Factory” as fully automated Elderly Care: “Robot care is better than no care”.

But: What about human beings as beings requiring relationships

The social *capital*, for example human capabilities (such as empathy) and willingness to care for others – in terms of existential dependence on other human beings, especially at the beginning and the end of life, but also in times of illness (Senghaas-Knobloch 2016, 203) – is threatened by the primacy of the economization of this sector.



Many thanks for listening
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