

Cost-effectiveness of communication trainings for healthcare staff

Heidi Stürzlinger

Background

Request of the Federal Ministry of Labour, Social Affairs, Health, Care, and Consumer Protection to Gesundheit Österreich GmbH (GOEG) in early 2022:

- What is the economic impact of improving doctor-patient communication quality through communication trainings?
- Can this intervention be considered cost effective? Does it even have a cost-saving potential?
- → Training not only for physicians, but for all healthcare personnel



Population:

- all patients and healthy individuals
- in a broader sense: healthcare professionals

Intervention:

 trainings for healthcare professionals to improve conversation quality and communication behavior of healthcare professionals toward patients in the context of healthcare, health promotion, and prevention

Comparator:

no intervention

Outcomes:

- Health outcomes
- Process quality/surrogate outcomes

- Systematic literature reviews on economic analyses
- Economic analyses (e.g., modelling studies, economic evaluations performed alongside a clinical trial), including studies that only examine costs or cost savings



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- Health outcomes:
 - Health status and quality of life
 - Patient safety (e.g., prescription of inappropriate therapies, frequency of complaints about treatment errors)
 - Patient satisfaction (e.g., recommendations of the physician)
 - Health and job satisfaction of healthcare personnel
- Process quality/surrogate outcomes:
 - Quality of communication
 - Process organization/teamwork in the healthcare facilities involved
 - Health behavior (therapy adherence and use of medical care)

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Systematic literature search

- − March 7th − 9th 2022, no time restriction
- Databases: CINAHL, EconLit, APA PsycInfo, and MEDLINE
- Keywords and MeSH terms related to: healthcare professional patient relation and communication, training and education, healthcare professions, cost (benefit) analyses



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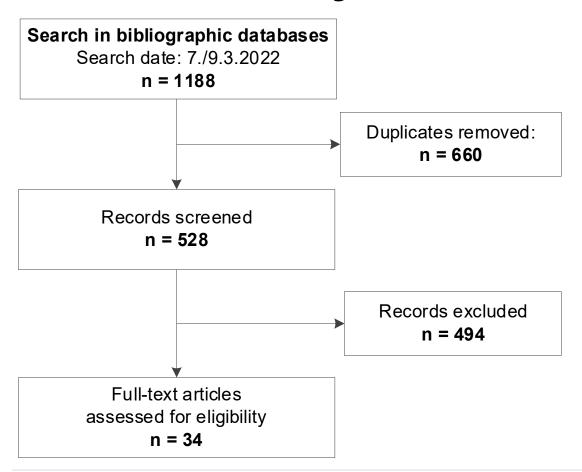
Hand search

Expert advice, reference lists of the identified systematic reviews, survey within the International Network
of Agencies for Health Technology Assessment (INAHTA), review of published study protocols



Results – study selection process

Title and abstract screening

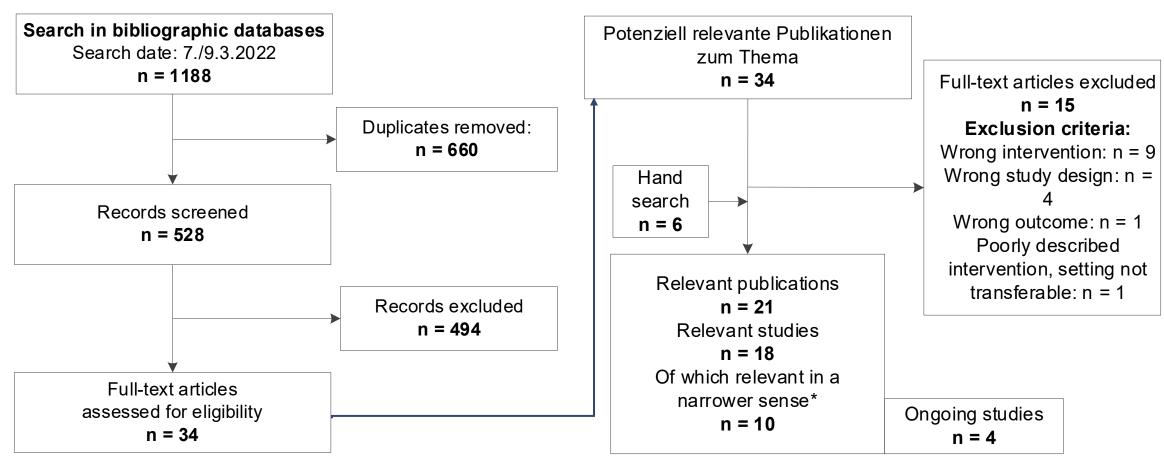




Results – study selection process

Title and abstract screening

Full text screening





^{*} Intervention differs from the comparator only in terms of communication training.

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2 modelling studies

16 clinical studies (mostly randomized controlled trials) with an assessment of costs or at least of resource consumption



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6 cost effectiveness studies

4 cost utility studies

3 cost benefit studies

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Topics / Disease areas

antibiotic prescriptions – 6 studies

Behavioral changes (in the broader sense) - 4 studies

Patient groups with limited speech ability (aphasia, intubation) – 2 studies

Mental health, general medicine/primary care, oncology, depression prevention, chronic inflammatory bowel disease, asthma –1 study each



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→ In 8 studies, communication training was part of a bundle of measures in the intervention group, with the control group receiving either a different measure (or bundle of measures) or no intervention.



(examined communication training as a separate intervention)

Cost assessment

Mostly direct costs

Only intervention costs – 2 studies

only follow-up costs (such as changes in the length of hospital stay) – 1 study

largely all relevant cost categories – 7 studies



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Intervention

Varying designs, ranging from short training sessions lasting a few hours at most to extensive training courses lasting several days and/or repeated training sessions, sometimes with refresher courses or feedback rounds.

40 minutes

4 hours

Training with refresher course after 4 years

8 hours per week for 4 weeks

Web material, several workshops, feedback loops

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 - In three studies, the benefits to be achieved are offset by relatively high costs, or not all relevant cost categories were included.
- Two studies find **no improvement or** even a **deterioration** in health-related outcomes with the additional use of communication training compared to the comparative intervention, with **similarly high or higher overall costs**.



Discussion

- The **heterogeneity** of the interventions and disease areas in the studies makes it difficult to directly compare the results with each other and can be the reason for inconsistency.
- It is not possible to **transfer** the individual results **between different countries** and settings (see also Oppong et al. 2018*).
- Communication training = **complex intervention**: health effects possible both on the part of patients and on the part of the healthcare professionals involved; a multiplier effect is conceivable (e.g., through a generally improved culture of communication, disease effects)
- The included studies mostly **focused on patient-related effects** and generally examined these effects (only) within the included study population.

^{*} Oppong, R.; Smith, R. D.; Little, P.; Verheij, T.; Butler, C. C.; Goossens, H.; Coenen, S.; Jowett, S.; Roberts, T. E.; Achana, F.; Stuart, B.; Coast, J. (2018): Cost-effectiveness of internet-based training for primary care clinicians on antibiotic prescribing for acute respiratory tract infections in Europe, Bd. 73



Limitations

- Abbreviated methodological approach due to time and resource constraints:
 - Literature screening and data extraction without dual review
 - Data extraction mostly without reviewing other potentially relevant publications (e.g., study protocols, supplements, publications of any underlying clinical studies)
 - No explicit quality assessment of the included economic studies → therefore, any potential risk of bias in the results cannot be definitively assessed
- Limiting factors regarding a rapid assessment: complex intervention that may have effects at various levels
- Literature search in 2022



Kontakt

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