APPLICATION OF MIXED-METHOD STUDY DESIGNS IN HEALTH-ECONOMIC-RELATED STUDIES. A NARRATIVE REVIEW.

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BACKGROUND

- Qualitative and quantitative research designs have their individual advantages and disadvantages.
- Mixed methods design combines both research methods and offers richer insights into the studied topic (Cann et al., 2013).
- This method is most popular in the social, behavioral, and health sciences (Cresswell, 2013).
- First publication with mixed method design in the mid 1980s (Cresswell, 2013).
- The German Institute for Quality and Efficiency in Health Care (IQWiG) recommends to combine qualitative and quantitative data to generate a wider spectrum of information for evaluation of health care services.

OBJECTIVE

- This review aims to give an overview over mixed method designs used in health care research studies published over the last five years.

METHODS

- A narrative database search was conducted in Pubmed.
- Search term: ‘mixed method’ [Title/Abstract] AND [Qualitative or Quantitative] Title/Abstract OR “cost analysis” Title/Abstract OR “cost control” Title/Abstract OR “cost effect” Title/Abstract OR cost efficacy Title/Abstract OR “cost efficiency” Title/Abstract OR “cost benefit” Title/Abstract OR “cost utility” Title/Abstract OR economic Title/Abstract OR “cost-effectiveness” Title/Abstract OR cost [Title/Abstract] OR QoL [Title/Abstract] OR QALY [Title/Abstract] OR “quality adjusted life years” Title/Abstract OR ICER Title/Abstract) OR econ [Title/Abstract] OR “Budget impact” Title/Abstract).
- Filter: published in the last 5 years
- Inclusion criteria:
  1. Study design: mixed method
  2. Combination of qualitative and quantitative survey procedures
  3. Published in the last 5 years
- Exclusion criteria:
  1. Study design: Reviews or pre-intervention study protocols
  2. Survey procedures filed with mixed methods, which only include several qualitative or quantitative methods
  3. No reference to health
  4. No further information about the used methods (because of missing full-text)
- According to pre-defined inclusion and exclusion criteria, titles and abstracts were screened regarding research location and mixed method designs and research methods. In a second step, full-text screening was used to extract details.

RESULTS

- In total n=238 research papers were identified.

Figure 2: Relevant studies per year of publication (n=82)

- For full-text screening n=82 studies remained and were included in the analysis.

Figure 3: Countries using mixed methods

- 25% of the evaluated studies (n=21) came from the UK, only n=3 relevant studies were conducted in Germany.

CONCLUSION

- Usage of mixed methods in health economic related studies are rare.
- Search results were mostly prevention and health promotion studies with a cost-relation part.
- Triangulation as mixed-method design was used in over 50% of the reviewed studies.
- As first method the analysis of quantitative Surveys and other data analysis were mostly used, followed by structured and semi-structured interviews. These two data collection methods were also mostly used as second method, but in reverse order.
- No trend over time can be identified, except an increase in mixed methods use in studies with a cost-relation from 2012-2014.