Measuring Questionable Conclusions and messages in Health Services Research

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Background

• Health Services Research (HSR)
  – Shows how social factors, financial and organisational systems, technologies and personal behaviours affect health care utilisation and outcomes.
  – Direct impact on decision making by citizens, health care providers and policy makers

• High occurrence of Questionable Research Practices (QRP) in Biomedical Research. In HSR?
Health Services Research

• Results are context bound

• Diversity of methodologies
  – Qualitative and quantitative

• Disseminated through scientific and societal publications

• No verification of messages and conclusions despite their impact
Overall aim of the project

- Explore the **prevalence, nature and causes** of QRPs in deriving **conclusions** and **messages** from HSR findings – in **scientific** and **societal publications**
- Identify **good practices**
- Develop and disseminate concrete **recommendations** and tools to **improve current practice**.
- Create awareness among researchers and institutions
**Aim**

To construct a method for measuring the prevalence of questionable conclusions and messages in scientific Health Services Research publications applicable across research designs.
Methods

Setting: Netherlands

Sample: 13 Health Services Research groups/institutes

Method: One consensus meeting, 14 interviews with leaders and representatives of the 13 participating groups/institutes. Content validation by 5 international leading health services researchers.

Pilot of measurement instrument: independent assessment by 2 researchers of 5 different HSR publications.
Definition Questionable reporting of conclusions and messages in HSR

“To report, either intentionally or unintentionally, conclusions or messages that may lead to incorrect inferences and do not accurately reflect the objectives, the methodology or the results of the study.”
Result 35 QRPs
Mainly

• The title does not adequately reflect the main findings

• The conclusions in the abstract do not adequately reflect the conclusions in the main text

• The conclusions do not adequately reflect the objectives of the study.

• The conclusions do not adequately reflect the findings

• Recommendations do not adequately reflect the results in context of the referenced literature.
Result 35 QRPs

- Main results are not or inadequately interpreted into the context of evidence
- Limitations are not adequately mentioned
- Unjustified generalisations
- Unjustified causation
- Inappropriate use of language
Result

Data Extraction Form (DEF)
The goal of the DEF is to identify questionable reporting of conclusions and messages

Construction of the form:
1. Characteristics of the publications (e.g. journal/funder/affiliations)
2. Characteristics of methodology
3. Questionable reporting strategies
Questions

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