

Kvalitative systematiske reviews – hvorfor og hvordan

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Tania E. A. Hansen, lektor, Absalon
Birgitte Nørgaard, professor, forskningsleder, SDU

Synopsis til Lærebogsprisen (samfundslitteratur) 2021



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- Stigende krav til litteratursøgningen i specialer og masterprojekter
- Stigende antal studerende udarbejder systematiske reviews som deres speciale eller masterprojekt – ofte med efterfølgende publicering
- Udvikling af valgfag
- Stringensen i såvel metode som afrapportering kan opleves som vanskelig og uopnåelig – som omvendt er det bærende element i systematiske reviews

Systematiske reviews - hvorfor

- Udviklet op gennem 1970erne
- En del af klinisk beslutningstagen i 1990erne
- Mange, mange review-typer – og flere på vej...
- Ingen international konsensus om reviewtyper
- Præsenterer ikke nye data, men samler evidensen inden for et felt

Moher D, Stewart L, Shekelle P. All in the Family: systematic reviews, rapid reviews, scoping reviews, realist reviews, and more. *Systematic reviews*. 2015;4:183

Systematiske reviews - hvorfor

Systematiske reviews har til formål at besvare et **præcist defineret forskningsspørgsmål**, ved at **indsamle al evidens**, der passer ind i specifikt definerede kriterier

For at sikre kvalitet og minimere bias, udarbejdes et systematisk review ud fra forudgående **systematiske, transparente og entydige metoder**

Kvalitative systematiske reviews - hvorfor

En generel opblomstring i og øget efterspørgsel efter:

- Systematiske reviews og den vidensform, de kan bidrage med indenfor sundhedsvidenskab
- Kvalitative studier og den vidensform, de kan bidrage med indenfor sundhedsvidenskab

= øget efterspørgsel efter og relevans af synteser af kvalitative studier / kvalitative systematiske reviews



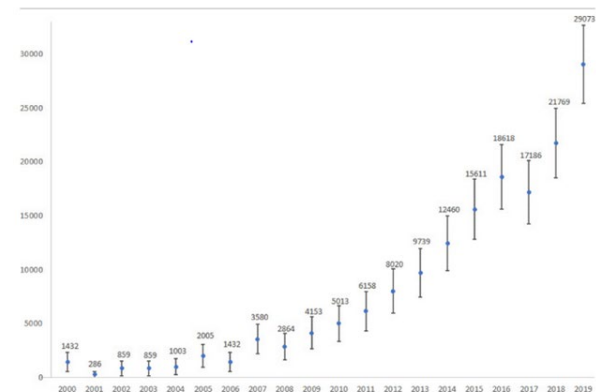
Journal of Clinical Epidemiology
Volume 138, October 2021, Pages 1-11



Original article

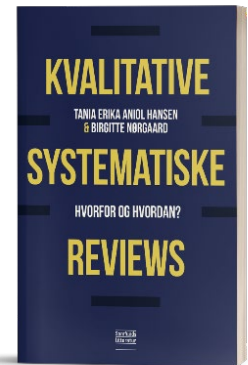
Nearly 80 systematic reviews were published each day: Observational study on trends in epidemiology and reporting over the years 2000-2019

Falk Hoffmann ^a, Katharina Allers ^a, Tanja Rombey ^{b, c}, Jasmin Helbach ^a, Amrei Hoffmann ^a, Tim Mathes ^b, Dawid Pieper ^b



Kvalitative systematiske reviews – hvorfor og hvordan

- Introduktion
- Kap. 1 – Design, protokol og registrering
- Kap. 2 – Søgestrategi
- Kap. 3 – Screening, inklusion og kvalitetsvurdering
- Kap. 4 – Data – definition og ekstraktion
- Kap. 5 – Datasyntese og analyse
- Kap. 6 – Afrapportering
- Ordliste



Kvalitative Systematiske Reviews

Level of evidence (LOE)	Description
Level I	Evidence from a systematic review or meta-analysis of all relevant RCTs (randomized controlled trial) or evidence-based clinical practice guidelines based on systematic reviews of RCTs or three or more RCTs of good quality that have similar results.
Level II	Evidence obtained from at least one well-designed RCT (e.g. large multi-site RCT).
Level III	Evidence obtained from well-designed controlled trials without randomization (i.e. quasi-experimental).
Level IV	Evidence from well-designed case-control or cohort studies.
Level V	Evidence from systematic reviews of descriptive and qualitative studies (meta-synthesis).
Level VI	Evidence from a single descriptive or qualitative study.
Level VII	Evidence from the opinion of authorities and/or reports of expert committees.

- ”er en metode til at integrere eller sammenligne fund fra kvalitative studier” (vores oversættelse)

Grant, M.J., Booth. A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info LibrJ.;26(2):91-108

This level of effectiveness rating scheme is based on the following: Ackley, B. J., Swan, B. A., Ladwig, G., & Tucker, S. (2008). Evidence-based nursing care guidelines: Medical-surgical interventions. (p. 7). St. Louis, MO: Mosby Elsevier.

Bruger- og klinikerperspektiver/overvejelser i relation til forskellige sygdomme og interventioner

Felt

- Undersøge barrierer og facilitatorer ift. at yde en konkret indsats
- Undersøgelse af brugerperspektiver
- Undersøge opfattelser af nye roller
- Informere om prioritering af forskellige indsatser, hvor evidensen er ens, og hvor præferencer og holdninger bliver afgørende faktorer¹

Table 2. Suggested search terms relating to qualitative methodology and social phenomena

- Qualitative research
- Interview
- Focus groups
- Thematic/theme
- Grounded theory
- Phenomenology
- Content analysis
- Ethnography
- Decision making
- Illness behaviour
- Knowledge
- Attitudes
- Social psychology
- Decision-making
- Health belief
- Social belief
- Lifestyle
- Life changing events
- Quality of life
- Psychological adaptation
- Anxiety/depression
- Social support
- Social adjustment
- Communication
- Emotions
- Interpersonal relations
- Satisfaction
- Self-esteem
- Employment

1 Grant, M.J., Booth. A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info LibrJ.;26(2):91-108

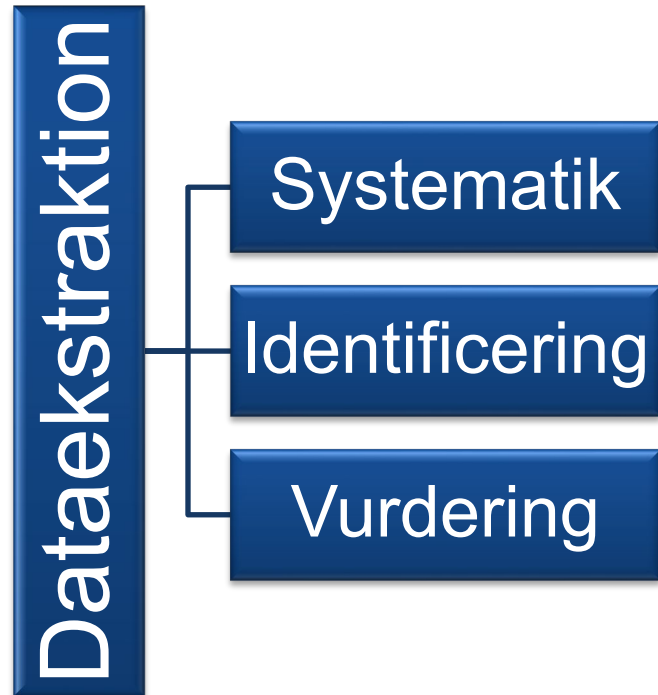
2 Table 2: Tong A, Palmer S, Craig JC, Strippoli GF. A guide to reading and using systematic reviews of qualitative research. NephrolDial Transplant. 2016;31(6):897-903

Data – definition og ekstraktion

Den systematik der anvendes ved identificering og vurdering af hvilke tekstdele af artiklerne, der er relevante i forhold til reviewets formål og forskningsspørgsmål...

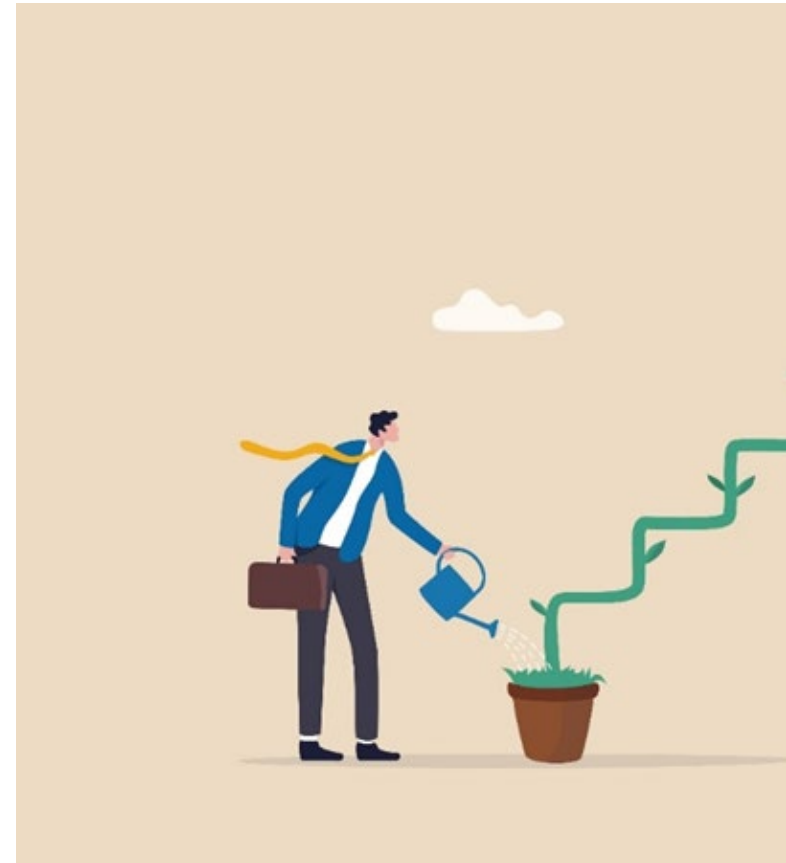


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Data – definition og ekstraktion

- 1) en deskriptiv gennemgang af de inkluderede artikler (deskriptiv tabel = generiske data, kontekst og deltagere, design og metoder),
- 2) en beslutning om, hvilken form for data der skal ekstraheres, samt
- 3) selve dataekstraktionen



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Data – definition og ekstraktion

Single eller double

IAM SINGLE

Kan nogle gange være den løsning, der (tidsmæssigt) er mulig

Kan øge risikoen for fejl og mistolkning

Litteraturen anbefaler generelt, at to personer ekstraherer uafhængigt af hinanden ⇒ sammenligning ⇒ diskussion eller tredje person løser eventuelle uenigheder

**IAM SINGLE
READY TO MINGLE**

At være to minimerer fejl og understøtter kvalitet

Data – definition og ekstraktion

Opmærksomhedspunkter

- Betydningsfulde data kan 'gemme sig' i andre dele af primær artiklen – fx i abstrakt, metode- eller diskussionsafsnittet
- Definition af data og hvor der ekstraheres fra er en central beslutning – skal fremgå tydeligt af metodeafsnittet og følges konsekvent



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Data – definition og ekstraktion

”What counts as data”

1. Hvilke afsnit i artiklerne skal data ekstraheres fra?

- abstrakt, resultatafsnit og/eller diskussionsafsnit

2. Hvilken form for data vil man ekstrahere?

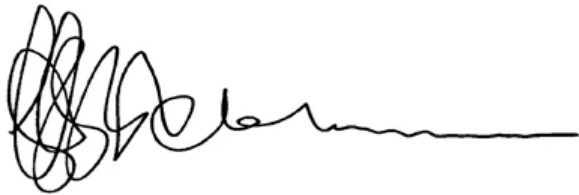
- hovedtemaer, alle temaer, citater, feltnoter, eller forfatternes synteser

Data on patients' perspectives were extracted by both authors as first-order constructs (participants' citations) and second-order constructs (researcher interpretation, including themes, subthemes and statements) (9).

Boks 4.1. Eksempel på beskrivelse af dataekstraktion.

Data – definition og ekstraktion

Vilkår og opmærksomheder



Sjældent en lineær proces



Den måde data ekstraheres på skal fremgå tydeligt af metodebeskrivelsen



Betydningsfulde data kan 'gemme sig' i andre dele af artiklen – fx i metode eller diskussionsafsnittet

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Betydningsfulde data afhænger af forskningsspørgsmål/reviewets formål

Datasyntese og analyse



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- En syntesemetode betegner processen, hvor resultaterne fra de inkluderede studier kombineres, opsummeres og integreres...

SYSTEMATIK

Datasyntese og analyse

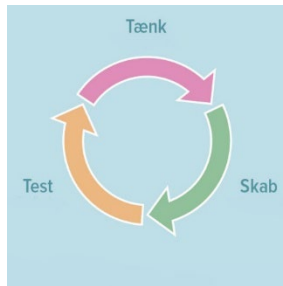
Uanset reviewtype



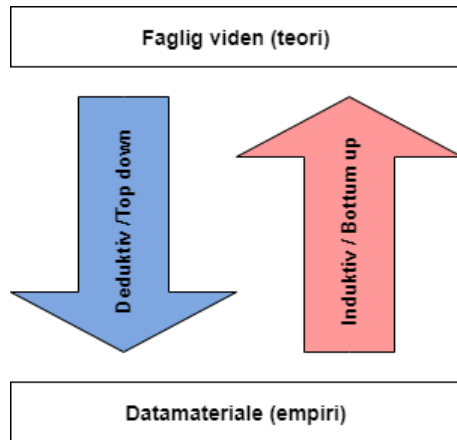
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- Hvilke ekstraherede data, der danner grundlag for syntesen? (overlap med dataekstraktion)
- Hvordan data er grupperet og kategoriseret?
- Hvordan kategorierne er udviklet? Er det en eller flere personer, der har udviklet og/eller opnå konsensus om de pågældende kategorier?
- Hvordan er de syntetiserede fund og medfølgende beskrivelser udarbejdet?
- Hvor ses eventuelle variationer i data, og hvilken betydning det har for resultaterne af syntesen?

Datasyntese og analyse



Er en iterativ proces - validering af tolkninger



Induktiv eller deduktiv kodning



Den måde data analyseres på skal fremgå tydeligt af metodebeskrivelsen



Dataanalyse afhænger af forskningsspørgsmål/reviewets formål

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Afrapportering

Guidelines til afrapportering

- Kan hjælpe forskere til at forbedre såvel udførelse som rapportering af kvalitative systematiske reviews
- Kan hjælpe læseren til at opnå en bedre forståelse for processen i udviklingen af et kvalitativt systematisk review
- Øger transparensen i afrapporteringen af kvalitative systematiske reviews
- Øger tilliden til fundene i et kvalitativt systematisk review

Afrapportering

PRISMA Guideline Preferred Reporting Items for Systematic Reviews and Meta-Analyses

27 items

- 1 - Titel
- 2 – Abstrakt
- 3 - Introduktion
- 4 - Metode
- 5 – Resultater
- 6 – Diskussion
- 7 – Andre informationer

Værdier

- Replication
- Trustworthiness (troværdighed)
- Applicability of findings (anvendelighed)

= kvantitative værdier...

Section/topic	#	Checklist item	Reported on page #
TITLE			
ABSTRACT	1	Identify the report as a systematic review, meta-analysis, or both.	See title, page 1.
INTRODUCTION			
Rationale	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria; participants; and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	See abstract, page 2.
OBJECTIVES	3	Describe the rationale for the review in the context of what is already known.	See introduction, page 2.
METHODS			
Protocol and registration	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	See introduction, page 2.
Eligibility criteria	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and if available, provide replication information including replication number.	See introduction, page 2.
Information sources	6	Specify study characteristics (e.g., PICOS, limits) which of filter used and reasons for exclusions (e.g., years considered, language, publication status) used to access the information sources.	See methods, page 4.
Search	7	Describe the all information sources (e.g., databases with dates of coverage, search strategies) and search to identify additional studies in the search and date last searched.	See methods, page 3.
Study selection	8	Present full electronic search strategy for at least one database, including any limits used, such as those for peer review only.	See methods, page 4.
Date collection process	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	See methods, page 2.
Date used	10	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	See methods, page 4.
Risk of bias in individual studies	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	See methods, page 4.
Summary measures	12	State the methods used for assessing risk of bias of individual studies (including identification of publication bias, selective reporting within studies).	See supplemental table 1.
Risk of bias across studies	13	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	See supplemental table 1.
Additional analyses	14	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	See methods, page 4.
RESULTS			
Study selection	15	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with references to flow diagram.	See figure 1.
Study characteristics	16	For each study, present the characteristics of the study as a whole and the specific characteristics of the study that may affect the cumulative evidence (e.g., risk of bias).	See table 1 and 2.
Risk of bias in individual studies	17	Present for each study, the results of the risk of bias assessment, and the reasons for the assessment.	See supplemental table 1.
Risk of bias across studies	18	Present for each study, the results of the risk of bias assessment, and the reasons for the assessment.	See supplemental table 1.
Summary measures	19	Present the results of the meta-analysis, including the estimates of effect and measures of confidence (e.g., confidence intervals, credible intervals, probability statements).	See table 1 and 2.
Additional analyses	20	Present the results of any additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	See table 1 and 2.
Results interpretation	21	Discuss the results in the context of other evidence, taking into account the confidence in the results and the limitations of the review.	See methods, page 8.
Conclusions	22	Provide a summary of the findings of the review and the confidence in the results of the review.	See pages 8-9.
Limitations	23	Discuss the limitations of the review.	See methods, page 9.
Conclusions and implications of key findings	24	Provide a summary of the findings of the review and the confidence in the results of the review.	See methods, page 10.
Systematic review registration	25	Provide the registration number for the review, if applicable.	See page 11.
Other information	26	Provide any other information that may be relevant to the review.	See page 11.

Afrapportering (og kvalitetsvurdering) - kvalitative systematiske reviews

ENTREQ

The **E**nhaning transparency in reporting the synthesis of qualitative research

5 domæner - 21 items

1 - Introduktion

2 - Metode og metodologi

3 - Litteratursøgning og
seleksion

4 - Kvalitetsvurdering

5 - Syntese

<https://pubmed.ncbi.nlm.nih.gov/23185978/>

Table 1 Enhancing transparency in reporting the synthesis of qualitative research: the ENTREQ statement

No	Item	Guide and description
1	Aim	State the research question the synthesis addresses.
2	Synthesis methodology	Identify the synthesis methodology or theoretical framework which underpins the synthesis, and describe the rationale for choice of methodology (e.g. meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory synthesis, realist synthesis, meta-aggregation, meta-study, framework synthesis).
3	Approach to searching	Indicate whether the search was pre-planned (comprehensive search strategies to seek all available studies) or iterative (to seek all available concepts until they theoretical saturation is achieved).
4	Inclusion criteria	Specify the inclusion/exclusion criteria (e.g. in terms of population, language, year limits, type of publication, study type).
5	Data sources	Describe the information sources used (e.g. electronic databases (MEDLINE, EMBASE, CINAHL, psycINFO, Econlit), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists) and when the searches conducted; provide the rationale for using the data sources.
6	Electronic Search strategy	Describe the literature search (e.g. provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research, and search limits).
7	Study screening methods	Describe the process of study screening and sifting (e.g. title, abstract and full text review, number of independent reviewers who screened studies).
8	Study characteristics	Present the characteristics of the included studies (e.g. year of publication, country, population, number of participants, data collection, methodology, analysis, research questions).
9	Study selection results	Identify the number of studies screened and provide reasons for study exclusion (e.g. for comprehensive searching, provide numbers of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications to the research question and/or contribution to theory development).
10	Rationale for appraisal	Describe the rationale and approach used to appraise the included studies or selected findings (e.g. assessment of conduct (validity and robustness), assessment of reporting (transparency), assessment of content and utility of the findings).
11	Appraisal items	State the tools, frameworks and criteria used to appraise the studies or selected findings (e.g. Existing tools: CASP, QARI, COREQ, Mays and Pope [25]; reviewer developed tools; describe the domains assessed: research team, study design, data analysis and interpretations, reporting).
12	Appraisal process	Indicate whether the appraisal was conducted independently by more than one reviewer and if consensus was required.
13	Appraisal results	Present results of the quality assessment and indicate which articles, if any, were weighted/excluded based on the assessment and give the rationale.
14	Data extraction	Indicate which sections of the primary studies were analysed and how were the data extracted from the primary studies? (e.g. all text under the headings "results /conclusions" were extracted electronically and entered into a computer software).
15	Software	State the computer software used, if any.
16	Number of reviewers	Identify who was involved in coding and analysis.
17	Coding	Describe the process for coding of data (e.g. line by line coding to search for concepts).
18	Study comparison	Describe how were comparisons made within and across studies (e.g. subsequent studies were coded into pre-existing concepts, and new concepts were created when deemed necessary).
19	Derivation of themes	Explain whether the process of deriving the themes or constructs was inductive or deductive.
20	Quotations	Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participant quotations of the author's interpretation.
21	Synthesis output	Present rich, compelling and useful results that go beyond a summary of the primary studies (e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct).

Afrapportering

- centrale værdier

Credibility – kan vi stole på resultaterne?

- Definition af data, detaljeret beskrivelse af fundene, refleksioner om bias og forfatterens forforståelser beskrives

Dependability – er processen logisk og reproducerbar?

- Eksplicit søgestrategi, kvalitetsvurdering, in- og eksklusionskriterier og softwareanvendelse

Transferability – er fundene overførbare til den konkrete setting?

- Beskrivelse af studiekarakteristika og kontekst

Confirmability – er fundene og fortolkningerne linket til data?

- Tjek citater, temaer og fortolkninger

Tong A, Palmer S, Craig JC, Strippoli GF. A guide to reading and using systematic reviews of qualitative research. *Nephrol Dial Transplant.* 2016;31(6):897-903.

Anvendelsen af kvalitative synteser

- Informere shared decision-making
- Udvikle patientuddannelser
- Indhold i guidelines
- Beslutninger i sundhedsvæsenet (policy-makers)

Det vi ville...

- Udarbejde en instruktiv, hands-on og let tilgængelig bog, der understøtter systematikken i arbejdet med kvalitative systematiske reviews
- Der kan anvendes af såvel uddannelsessøgende, undervisere og forskere
- Med henblik på at bidrage til evidensbaseret praksis



Tak for opmærksomheden

