From research to policy making: How to integrate mixed methods research in evidence based medicine studies
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Background
Policy makers increasingly want to underpin their decisions based on evidence. Accurate literature helps to best draw inferences from science to practice. Systematic reviews (SRev) are seen as source of best evidence. Nowadays there is a growing interest in incorporating qualitative methods in SRev but research in this area is lacking and its benefits are still being discussed. Differently to traditional SRev which use qualitative or quantitative studies only, a Mixed Methods (MM) SRev enrolls both qualitative and quantitative studies. Mixing studies and merging their data could cause a risk of chaos and the reliability of the findings could be questionable. Against this background, we propose ways on how to incorporate qualitative research in SRev and overviews of SRev (OSRev).

Methods
Proposed steps for conducting a SRev and OSRev are: a) Definition of a specific and structured research question using PICOS (Population, Intervention, Control, Outcome, Study design), b) Systematic search strategy (definition of search terms and data source), c) Literature screening applying predefined criteria (step 1: titles and abstracts, step 2: full text), d) Quality validation of selected studies, e) Data extraction (c, d, e: involves two independent reviewers), f) Data analysis, g) Summary of study results, h) Preparation of the questionnaire, run of qualitative interviews, h) Discussion and interpretation of findings, i) Identification of needed research.

Results
MM research in EbM is recommendable when alone the qualitative and quantitative procedure cannot answer the research question completely. Specific questionnaires should be developed to answer parts of the research question that could not be answered by the SRev or OSRev. Qualitative interviews would add value on the quality of SRev and OSRev,
ensure more comprehensive results and an in-depth understanding of the association between the exposure and outcome(s).

Conclusions
Future Research
SRev and ORev performed in a systematic way according to strict predefined protocols will increasingly be seen as key source of information for policy makers. Both these study types would rank at the top of hierarchy of evidence levels.

Integrating qualitative research in SRev and ORev would add value to generated evidence. Further research is needed to make the role of qualitative research in EbM more visible.

Key messages
- Proposed ways to increase the quality of research available for practice and policy making.
- Evidence from qualitative interviews can play an important role in adding value to standard systematic reviews and overviews of systematic reviews for policy and practice.