Methods to reduce risk of bias in knowledge translation interventional studies: Protocol of systematic review

Introduction

Most of the KTE interventions do not have enough compatibility, usually because of the dependency of their effects on the context of studies. Furthermore, different levels of quality over studies can also be responsible for observed heterogeneity between estimated effects of similar interventions.

Objectives

1-To describe how different methods (sequence generation, allocation concealment, blinding, incomplete outcome data, selective outcome reporting) were applied to reduce the ROB in randomised KTE studies

2- To estimate the contribution of the estimated ROB in observed heterogeneity between the study' estimated effects of KTE interventions in health related issues.

Search

Databases: MEDLINE, Cochrane central register, DARE, SCOPUS, ERIC, EPPI and Web of Science.

Search strategy: Example of search strategy in Scopus is provided(below).

Primary plan of synthesis: A narrative synthesis of the findings from the included studies, structured around the type of the method, type of study intervention/outcome (according to EPOC) and study audience will be provided. An estimation of the risk of each bias(selection bias, performance bias, attrition bias, detection bias) and the overall ROB for every single included study will be provided(figure1). The relationship between the intervention/method/audience with ROB will be drown(figure2). The contribution of each method to the observed heterogeneity between different studies will be estimated through meta-regression(figure3).

Figure1:
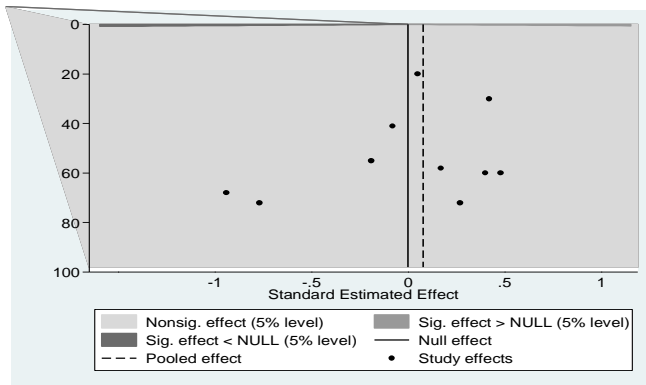
Caption 1:Hypothetical example of funnel graph of study' effect against Risk Of Bias: studies that show stronger effect for an specific intervention (e.g. Audit and feedback in Providers) included higher risk of bias

Figure 2:

(A)

(B)

(C)
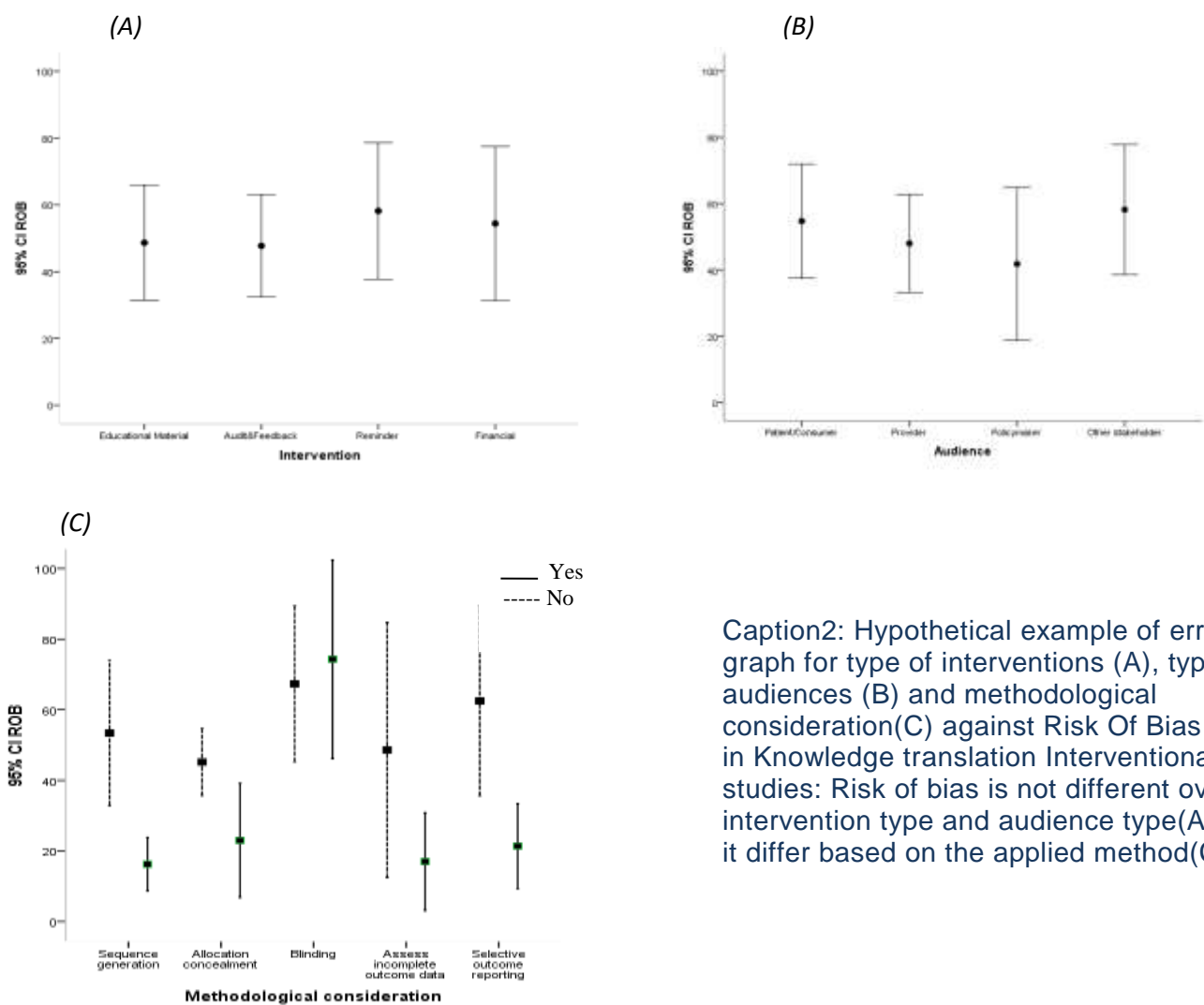
Caption2: Hypothetical example of error bar graph for type of interventions (A), type of audiences (B) and methodological consideration(C) against Risk Of Bias (ROB) in Knowledge translation Interventional studies: Risk of bias is not different over intervention type and audience type(A,B) but it differ based on the applied method(C).

Figure 3:
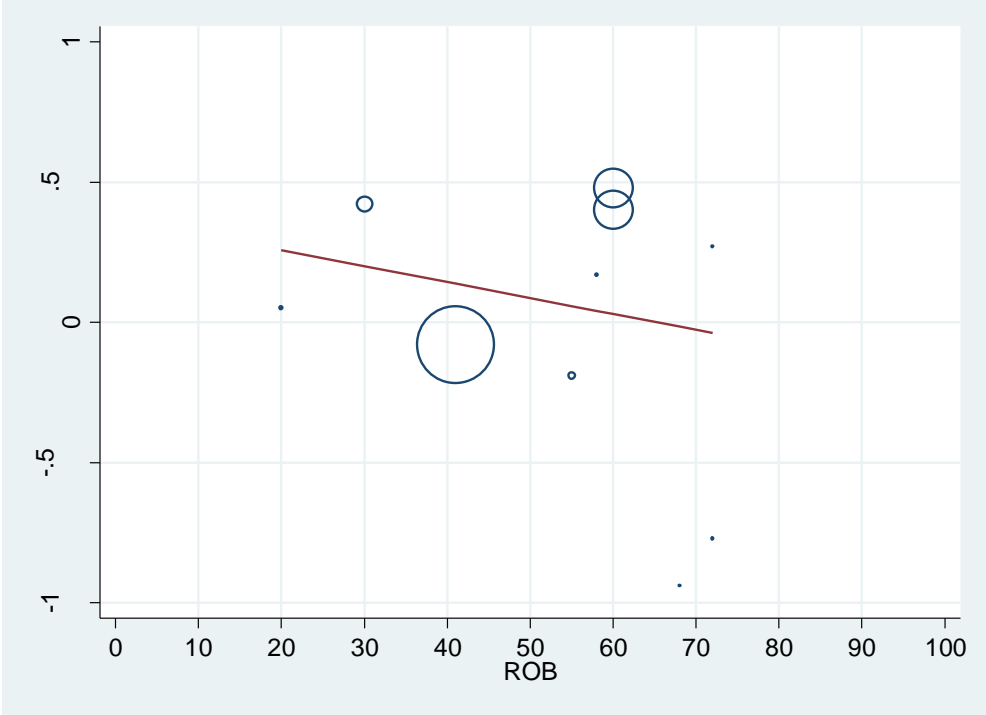
Caption3:Hypothetical example of meta-regression plot graph of observed effect of a specific intervention (e.g. Audit and feedback in Providers) against the difference in Risk Of Bias (ROB) in Knowledge translation Interventional studies. The precision of the effect estimates in the plot is showed by sizing the open circles