# Effective Digital Solutions for Problem Drinking in Treatment-Seeking Smokers to Reduce the Risk of Cancer

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Introduction

CHALLENGE:
Over 365,000 Ontarians smoke cigarettes and drink alcohol, best-practice guidelines recommend treating tobacco and alcohol concurrently
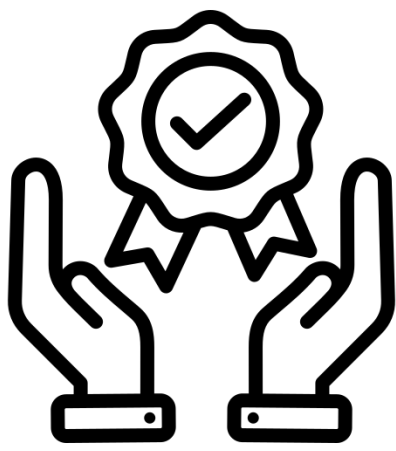
EXISTING GAP:
Few primary care providers in Ontario deliver brief alcohol interventions routinely, and treatments for alcohol and tobacco are usually delivered separately

PROPOSED SOLUTION:
Digital interventions could address these barriers There is promising evidence that digital interventions can curb problem drinking and help people quit smoking.
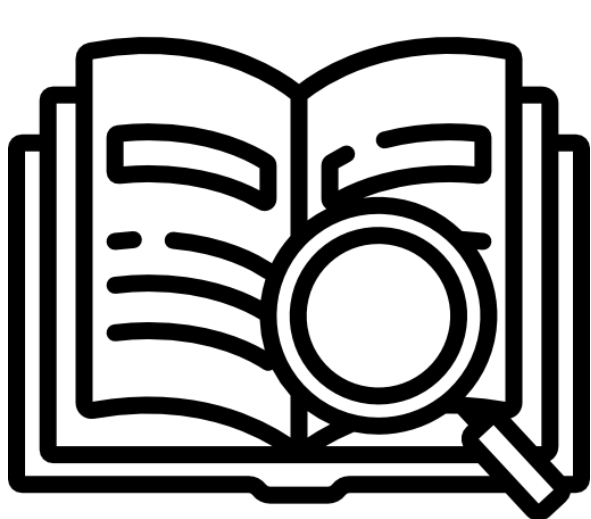
Objective

Identify effective Behavioural Change Techniques (BCTs) targeting the dual use of tobacco and alcohol
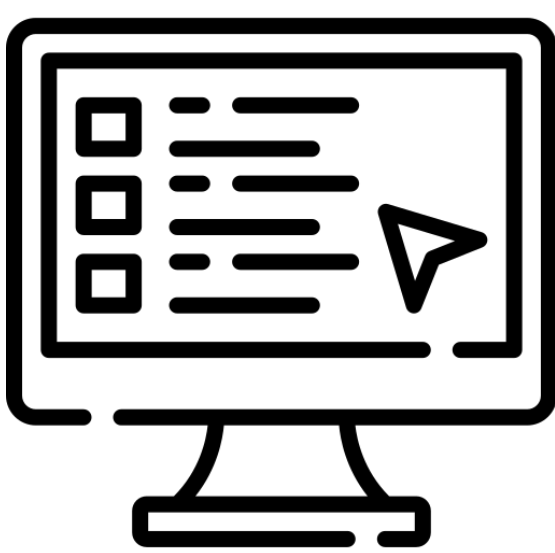
Methods

1 Literature Search
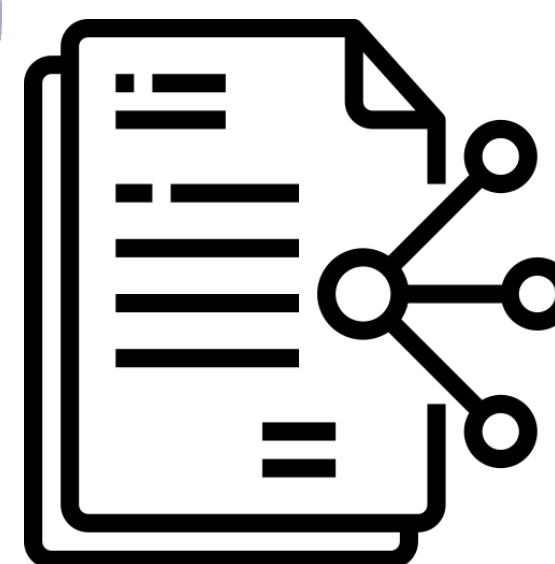Searched Academic databases for relevant literature

2 Article Screening
Articles were screened based on inclusion/exclusion criteria

3 Data Extraction
Selected articles were extracted and assessed for bias

4 Data Analysis
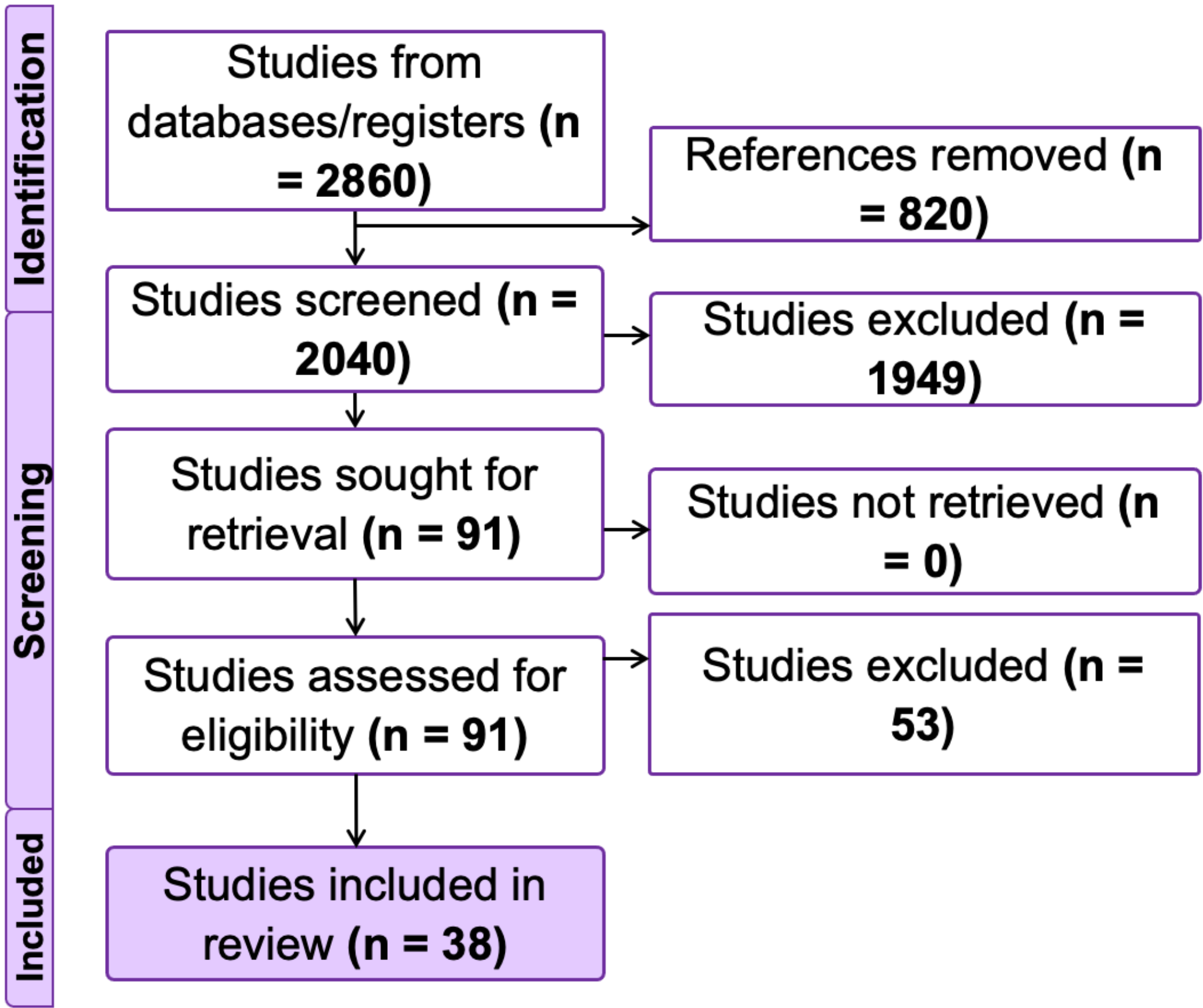Data analysis was conducted using Covidence and Excel
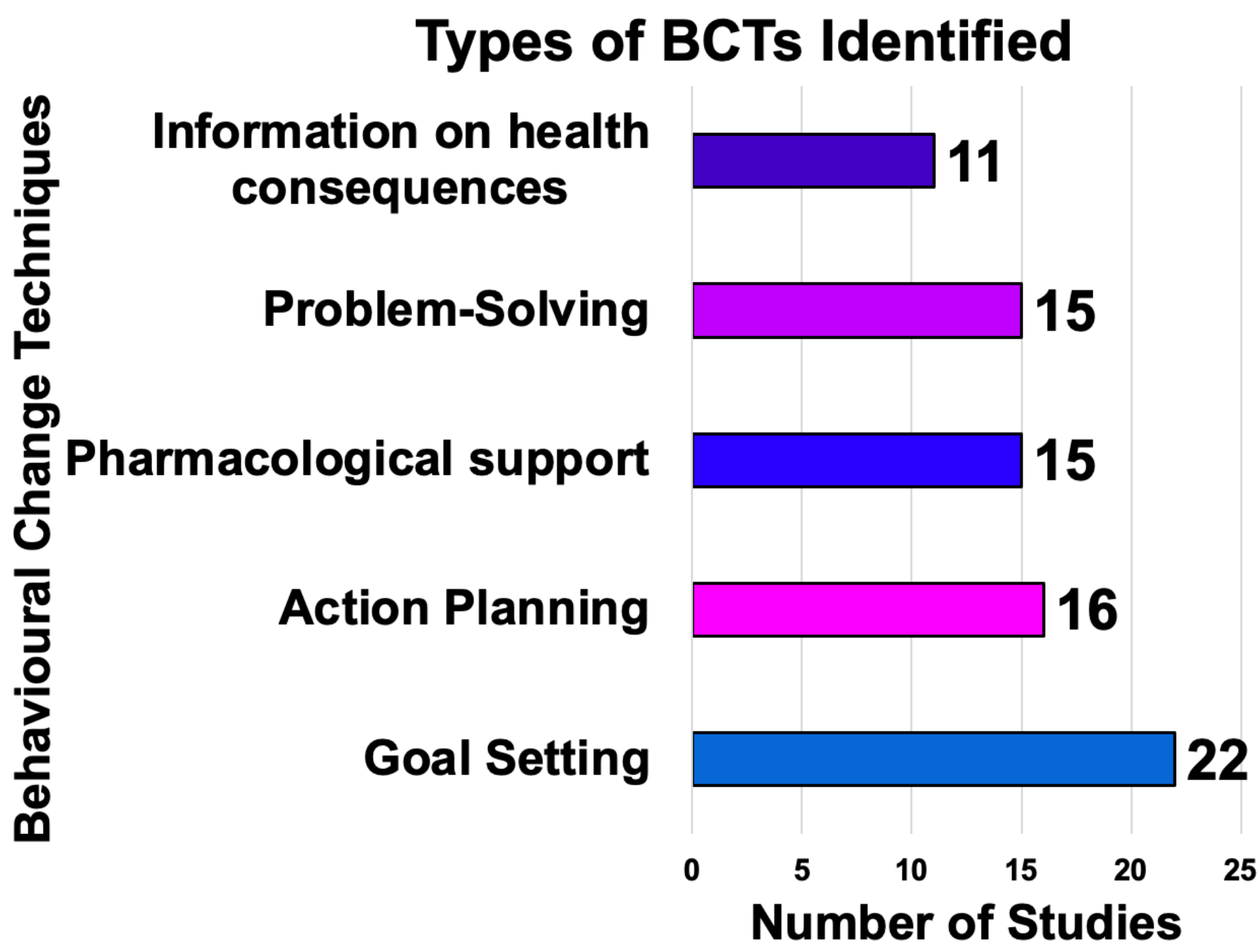
Results

Figure 1. PRISMA flowchart of Review

Identification
- Studies from databases/registers (n = 2860) → References removed (n = 820)

Screening
- Studies screened (n = 2040) → Studies excluded (n = 1949)
- Studies sought for retrieval (n = 91) → Studies not retrieved (n = 0)
- Studies assessed for eligibility (n = 91) → Studies excluded (n = 53)

Included
- Studies included in review (n = 38)

Types of BCTs Identified (Behavioural Change Techniques / Number of Studies)
- Information on health consequences: 11
- Problem-Solving: 15
- Pharmacological support: 15
- Action Planning: 16
- Goal Setting: 22

Table 1. Most common types of BCTs identified in review

Combination BCTs (BCTs Activities / Number of Studies)
- Goal Setting & Action Planning: 13
- Goal Setting & Problem Solving: 12
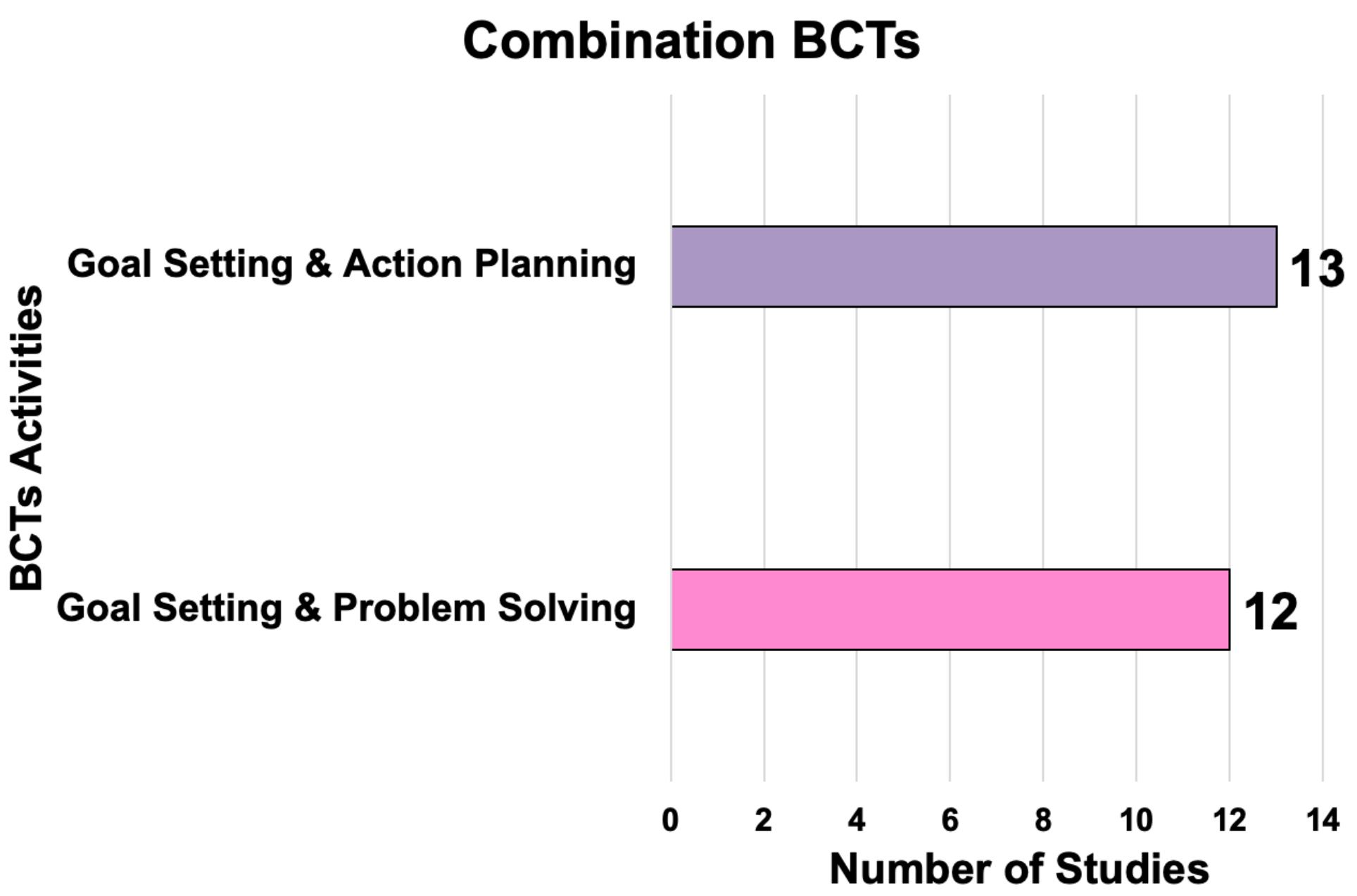
Table 2. Frequency of combination BCTs identified in review

Bias of Studies (Level of Bias / Number of Studies)
- High: 5
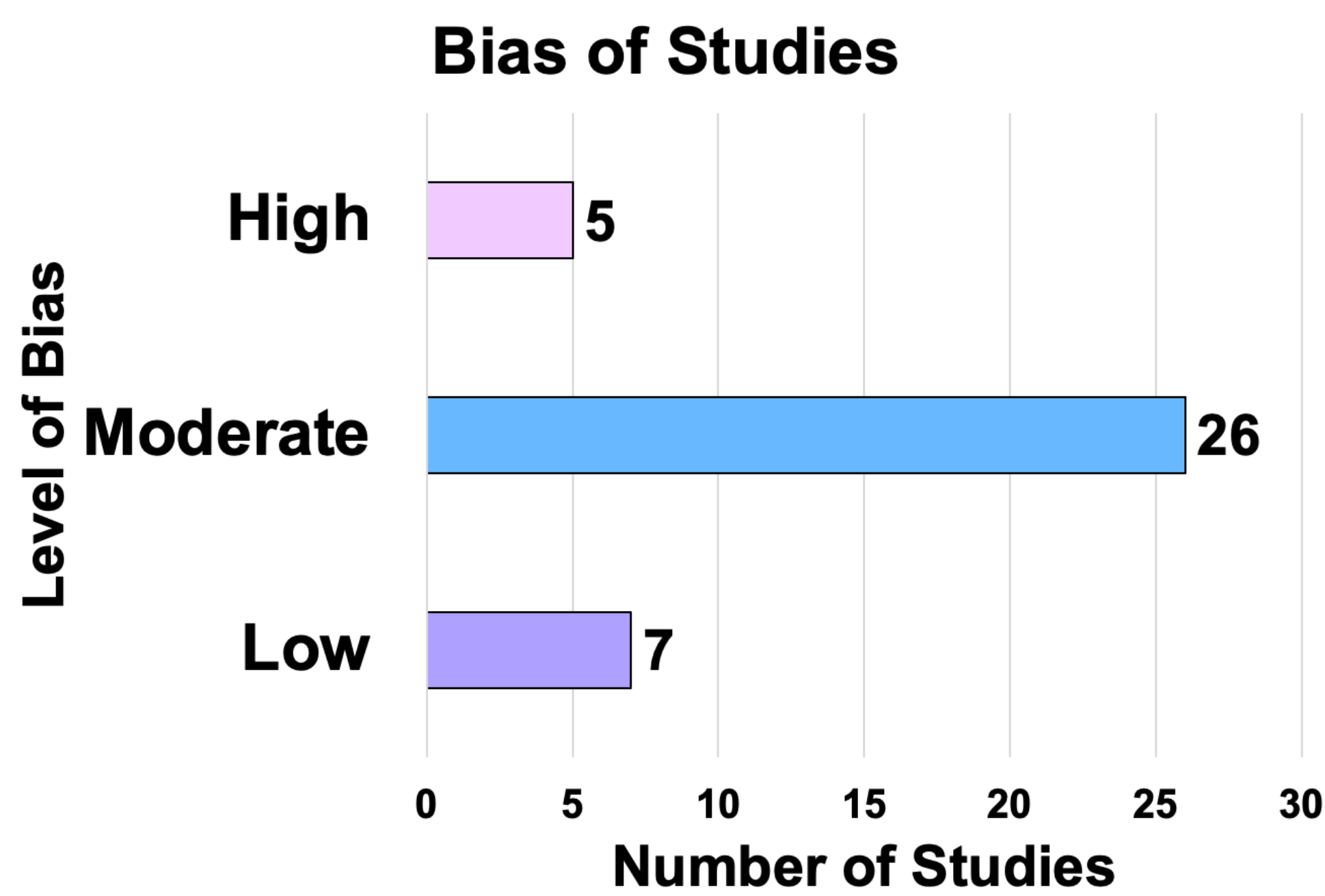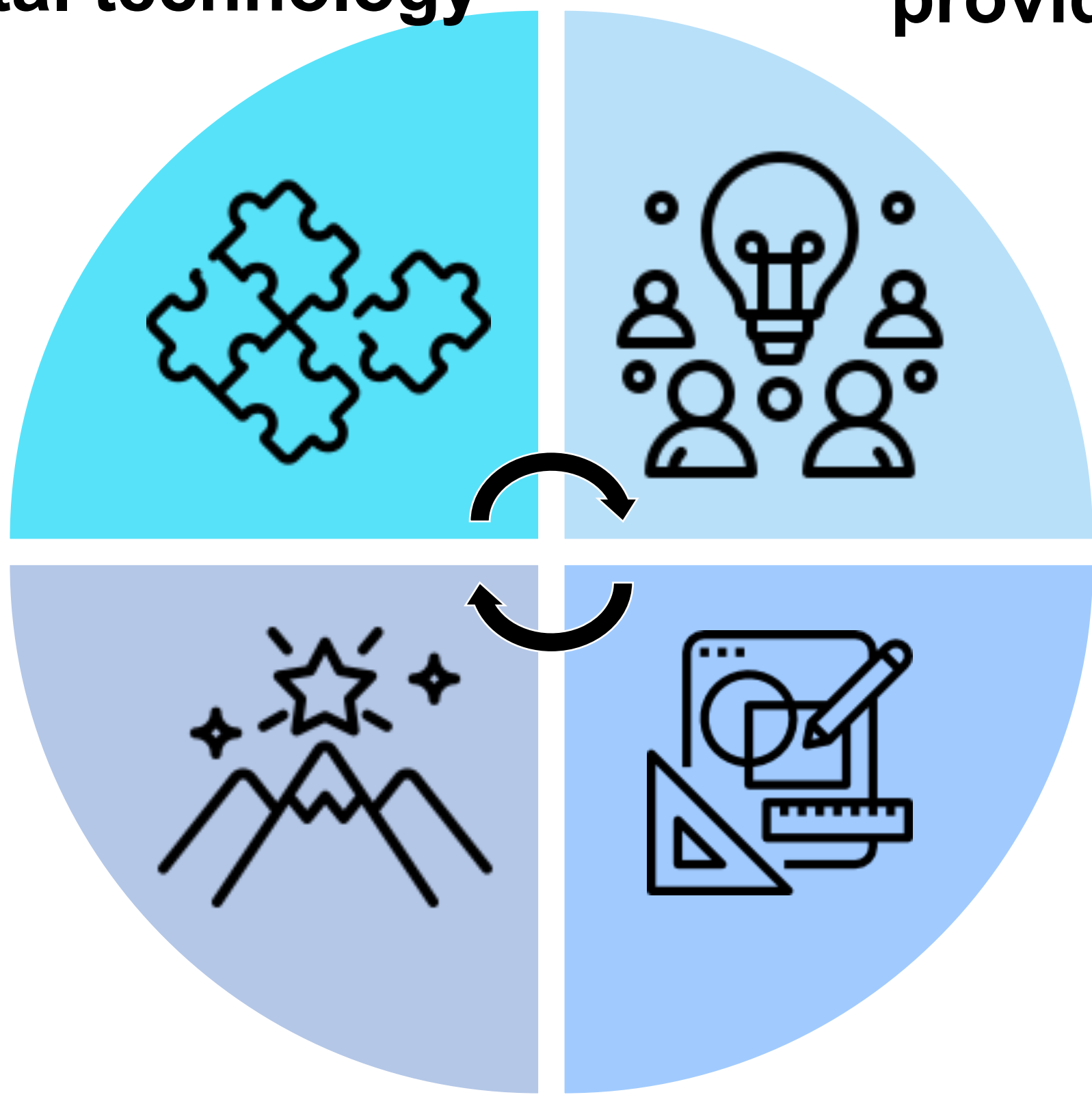- Moderate: 26
- Low: 7

Table 3. Bias level of studies in review using JBI quality assessment checklist

Conclusion

Decide what components to include in our digital technology

Providing an effective resource for primary care providers

Act as a foundation for helping people who use alcohol and tobacco

Help optimize, reproduce, scale and spread effective digital solutions

Future Directions

Conduct a Delphi Study by inviting experts in the field to reach consensus on which BCTs to include in our patient portal

Acknowledgements

References

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2. Minian N, Baliunas D, Noormohamed A, Zawertailo L, Giesbrecht N, Hendershot CS, Le Foll B, Rehm J, Samokhvalov AV, Selby PL. The effect of a clinical decision support system on prompting an intervention for risky alcohol use in a primary care smoking cessation program: a cluster randomized trial. Implementation science. 2019 Dec;14(1):1-0.

3. Garritty C, Gartlehner G, Nussbaumer-Streit B, King VJ, Hamel C, Kamel C, et al. Cochrane Rapid Reviews Methods Group offers evidence-informed guidance to conduct rapid reviews. J Clin Epidemiol. 2021;130:13-22.