

A living overview of systematic reviews with machine learning enable access to the best available evidence on breastfeeding in real time

Breastfeeding on health: a Living Overview of the Evidence (L-OVE)

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BACKGROUND

The scientific community and the immediate environment of women who wish to breastfeed are determinant to support its implementation and ensure the continuity of breastfeeding. The knowledge of the best scientific evidence on breastfeeding is vital to promote better decisions at all levels. The aim of this project is to create a living overview of systematic reviews that will enable access to the best available evidence in breastfeeding.

METHODS

A living overview of systematic reviews of effects of breastfeeding on maternal and infant health was performed. The research was conducted through a search engine for the Epistemonikos database, which collects systematic reviews from 10 databases (see figure 1) with collaboration between humans and machine learning. There are no deadlines since the searches are performed weekly and the new reviews are incorporated at the earliest opportunity. A double-blind peer review was conducted using the Epistemonikos' Collaborator tool. The reviews were categorised according to their appropriate, predetermined PICOT question (Participants, Intervention, Comparator, Outcomes, Time), and there was assessment of certainty following the GRADE guidelines.

RESULTS

This project is within its early stages and only partial results of the work undertaken can be presented. On 24 April 2019, the number of potentially eligible systematic reviews retrieved was 2147, of which 1515 have been screened, with 735 already included by at least two reviewers (632 still pending; figure 2). Currently, the classification of systematic reviews into different questions or topics of interest is beginning.

DISCUSSION AND CONCLUSIONS

The maintenance of a living overview of systematic reviews where humans and robots collaborate, will enable access to the best available evidence in real time; at its core are systematic reviews with assessment of certainty performed with GRADE, and created through an international collaborative system.



Figure 1: Databases where systematic reviews are collected

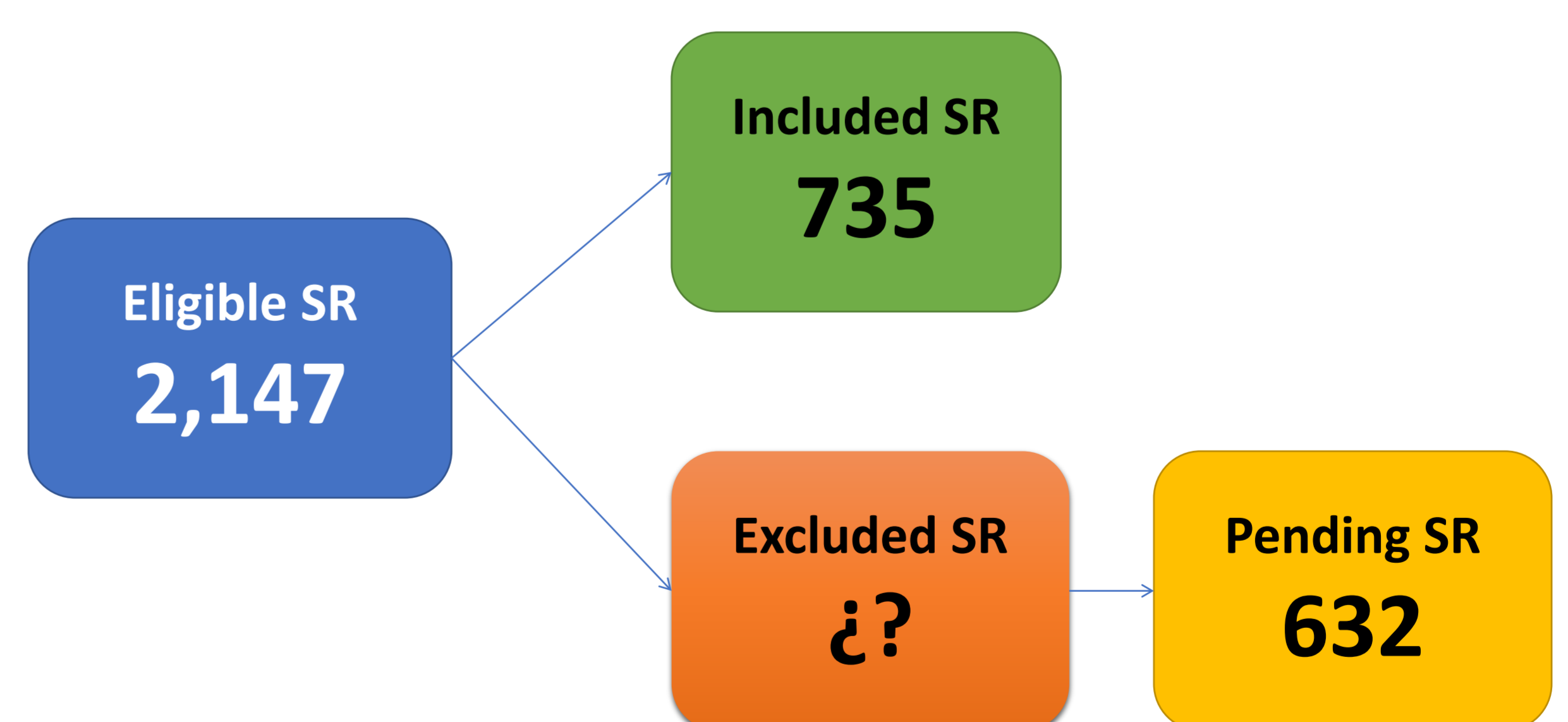


Figure 2: Updated summary of results



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