

Relationship between breast feeding and motor development in children: Protocol for a systematic review and meta-analysis

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Introduction The recommendations of most health organisations encourage mothers to keep exclusive breast feeding during the first 6 months and combining breast feeding with complementary feeding at least during the first and second years, due to the numerous immunologic, cognitive developmental and motor skill benefits that breast feeding confers. Although the influence of breast feeding on motor development during childhood has been studied, the findings are inconsistent, and some studies have even reported no effect. This manuscript presents a protocol for a systematic review and meta-analysis, with the aim of reviewing the relationship between breast feeding and motor skill development in children in terms of duration, exclusivity or non-exclusivity of breast feeding.

Methods and analysis The search will be conducted using Medline (via PubMed), EMBASE, Web of Science and Cochrane Library from inception to December 2019. Observational studies (cross-sectional and follow-up studies) written in English or Spanish that investigate the association between breast feeding and motor development in children will be included. This systematic review and meta-analysis protocol follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols. The Critical Appraisal Checklist for Analytical Cross-Sectional Studies and The Newcastle-Ottawa Quality Assessment Scale for longitudinal studies will be used to assess the quality of included studies. The effect of breast feeding on motor skill development will be calculated as the primary outcome. Subgroup analyses will be carried out based on the characteristics of motor skill development and the population included. Ethics and dissemination Ethical approval is not

required because the data used will be obtained from published studies, and there will be no concerns about privacy. The findings from this study will be relevant information regarding the association of breast feeding with motor development in children and could be used encourage to improve breastfeeding rates. The results will be published in a peer-reviewed journal. PROSPERO registration number CRD42018093706. © 2019 Author(s).

breastfeeding

children

motor development

motor skills

breast feeding

child

Cochrane Library

cross-sectional study

Embase

female

follow up

human

human experiment

longitudinal study

male

Medline

motor development

motor performance

observational study

outcome assessment

Preferred Reporting Items for Systematic Reviews and Meta-Analyses

privacy

quality control

review

systematic review

Web of Science

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