Review protocol for review question: What interventions in the postnatal period are effective at promoting emotional attachment?

Table 3: Review protocol

Field (based on PRISMA-P)	Content
Review question	What interventions in the postnatal period are effective at promoting emotional attachment?
Type of review question	Intervention
Objective of the review	This review aims to determine what interventions in the postnatal period (defined as up to 8 weeks) are effective at promoting emotional attachment between mother and baby.
Eligibility criteria – population/disease/condition/issue/domain	Women who have given birth at term to a healthy baby, from the birth of the baby to 8 weeks after birth. Babies being taken into care, women with a mental health problem and women with alcohol and drug misuse will be excluded from this review Reasons: • NICE guideline on antenatal and postnatal mental health (CG192) covers women with depression, anxiety disorders, eating disorders, drug- and alcohol-use disorders and severe mental illness, and has a section titled “The mother-baby relationship”. • Women with alcohol and drug misuse are usually cared for by specialist teams and this guideline covers routine care. • NICE guideline on children’s attachment (NG26) covers the attachment needs of babies being taken into care).
Eligibility criteria – intervention(s)	Intervention 1. Provision of information (verbally, electronically or on paper), for example, handing out a leaflet about the following topics: • skin-to-skin contact • cuddling the baby

	• talking to the baby • massaging the baby • being responsive to cues or small signals the baby may send • copying the baby's noises and gestures • providing comfort when the baby is upset • getting enough sleep and having support Intervention 2. Skills training (for example, teaching mothers how to massage babies or role modelling by a healthcare professional during home visits.) Only interventions initiated within the first 8 weeks after birth will be included. Skin-to-skin contact right after birth will not be covered as this is covered by the NICE guideline on intrapartum care for healthy women and babies (CG190) and by the NICE guideline on caesarean section (CG132).
Eligibility criteria – comparator(s)	Comparator 1. Standard care or different information packets. Modalities of information (for example, oral versus written) will be not be compared. Comparator 2. Standard care or different educational intervention Intervention 1 will be compared to comparator 1, intervention 2 will be compared with comparator 2. Data permitting, interventions 1 and 2 will be compared against each other.
Outcomes and prioritisation	<u>Critical outcomes:</u> • Mother's feelings towards the baby when the baby is 12 to 18 months of age (default MIDs) • Quality of mother-baby interaction when the baby is 12 to 18 months of age (default MIDs) • Proportion of babies displaying an insecure attachment type (which includes ambivalent, avoidance, disorganised) when the baby is 12 to 18 months of age (default MIDs) <u>Important outcomes:</u> • The nature of the early mother-baby relationship (based on the mother's subjective perception) when the baby is 12 to 18 months of age (default MIDs)

	• Social behaviour of the baby when the baby is 12 to 18 months of age (default MIDs) When choosing between proportions and mean scores, outcome measures that allow us to carry out a meta-analysis with the highest number of studies will be prioritised. If meta-analysis is not possible, for example due to the heterogeneity of the interventions, the choice between using proportions or mean scores will be made for each scale based on the way in which most studies report the data. Please note that if the proportions in different studies are based on different cut-off scores, this will not be considered as presenting the outcomes in the same way. If the number of studies is the same for proportions with a specific cut-off score and for mean scores, proportions will be prioritised. If a choice is needed between different cut-off scores used in different papers to calculate proportions, the rationale for using a specific cut-off score, as provided in the paper, will be discussed within the technical team, and if needed with members of the committee, and the most appropriate rationale will be selected
Eligibility criteria – study design	• Published full text papers only • Systematic review of RCTs • RCTs • Only if RCTs unavailable or there is limited data to inform decision making: prospective or retrospective comparative cohort studies if at least 100 mother-baby pairs in each arm • Prospective study designs will be prioritised over retrospective study designs • Conference abstracts will not be considered
Other inclusion exclusion criteria	Studies from low- and middle-income countries will be excluded Date: published from 2000. Practice has changed since 2000 and anything published before this is unlikely to be relevant.
Proposed sensitivity/sub-group analysis, or meta-regression	Groups that will be reviewed and analysed separately: • young women (19 years or under) • women with physical or cognitive disabilities • women who have difficulty accessing postnatal care services, for example social circumstances, language, cultural or life-style barriers

	In the presence of heterogeneity, the following subgroups will be considered for sensitivity analysis: • women with history of maltreatment / domestic violence Statistical heterogeneity will be assessed by visually examining the forest plots and by calculating the I2 inconsistency statistic (with an I2 value of more than 50% indicating considerable heterogeneity). Potential confounders: • age • educational level • employment condition • income • receiving support for baby care and domestic work • single parent families • sex of the baby
Selection process – duplicate screening/selection/analysis	Review questions selected as high priorities for health economic analysis (and those selected as medium priorities and where health economic analysis could influence recommendations) will be subject to dual weeding and study selection; any discrepancies above 10% of the dual weeded resources will be resolved through discussion between the first and second reviewers or by reference to a third person. This review question was not prioritised for health economic analysis and so no formal dual weeding, study selection (inclusion/exclusion) or data extraction into evidence tables will be undertaken. (However, internal (NGA) quality assurance processes will include consideration of the outcomes of weeding, study selection and data extraction and the committee will review the results of study selection and data extraction).
Data management (software)	Pairwise meta-analyses will be performed using Cochrane Review Manager (RevMan5). 'GRADEpro' will be used to assess the quality of evidence for each outcome.
Information sources – databases and dates	The following databases will be searched: • CCRCT • CDSR • DARE • Embase • EMCare

	• HTA Database • MEDLINE and MEDLINE IN-PROCESS Searches will be restricted by: • Date limitations: 2000 to 4th December 2019 • English language • RCTs • Systematic reviews Other searches: • Inclusion lists of systematic reviews
Identify if an update	This guideline will update the NICE guideline on postnatal care up to 8 weeks after birth. All reviews are being conducted afresh. However the following recommendations on emotional attachment were included in CG37 (2006): 1.4.5 Assessment for emotional attachment should be carried out at each postnatal contact. [2006] 1.4.6 Home visits should be used as an opportunity to promote parent- or mother-to-baby emotional attachment. [2006] 1.4.7 Women should be encouraged to develop social networks as this promotes positive mother−baby interaction. [2006] 1.4.8 Group based parent-training programmes designed to promote emotional attachment and improve parenting skills should be available to parents who wish to access them. [2006] 1.4.9 Healthcare providers should offer fathers information and support in adjusting to their new role and responsibilities within the family unit. [2006] Note that the committee will not be able to update recommendation 1.4.9 (which will be stood down together with all recommendations from the 2006 version of CG37) because father-child attachment is excluded from this review question.
Author contacts	National Guideline Alliance https://www.nice.org.uk/guidance/indevelopment/gid-ng10070

Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual
Search strategy – for one database	For details please see appendix B of the guideline
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables) of the guideline.
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) or H (economic evidence tables) of the guideline.
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group http://www.gradeworkinggroup.org/
Criteria for quantitative synthesis (where suitable)	For details please see section 6.4 of Developing NICE guidelines: the manual
Methods for analysis – combining studies and exploring (in)consistency	For details please see Supplement 1.
Meta-bias assessment – publication bias, selective reporting bias	For details please see section 6.2 of Developing NICE guidelines: the manual.
Assessment of confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual
Rationale/context – Current management	For details please see the introduction to the evidence review in the guideline.
Describe contributions of authors and guarantor	A multidisciplinary committee developed the guideline. The committee was convened by The National Guideline Alliance and chaired by Dr David Jewell in line with section 3 of Developing NICE guidelines: the manual. Staff from The National Guideline Alliance undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost-effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details please see the methods chapter of the guideline.

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Roles of sponsor	NICE funds The National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England
PROSPERO registration number	This protocol has not been registered in PROSPERO

CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; DARE: Database of Abstracts of Reviews of Effects; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HTA: Health Technology Assessment; MID: minimally important difference; NGA: National Guideline Alliance; NICE: National Institute for Health and Care Excellence; RCT: randomised controlled trial; RoB: risk of bias; SD: standard deviation