

Supplementary file 1: Search strategy

We employed abbreviated systematic review methods: namely, a single reviewer completed the study selection and data extraction with verification by a second reviewer and we omitted quality assessments of included studies. The search strategy was developed and tailored for use with PubMed and ERIC databases and reviewed by an information scientist. Publications from January-October 2020 were compiled from PubMed and ERIC using Boolean searches (Table 1). To supplement database searches, the reference lists of records meeting the inclusion criteria and the websites of more than 80 organizations listed on the Nurturing Care for Early Childhood Development website were manually searched by a single reviewer for additional studies to be assessed for inclusion. Additionally, PROSPERO and several COVID-19-specific databases were manually searched for relevant records (Covid-19 Rapid Evidence Reviews; Cochrane, and Innocenti Children and COVID-19 Research Library). Articles published in English, French, Spanish and Portuguese were included. Published quantitative or qualitative studies that reported on a full methodology were included, in addition to preprints and grey literature to ensure representativeness and due to the rapidly evolving nature of COVID-19 evidence. Policy briefs, editorials, commentaries, and strategies were excluded from the rapid review. The inclusion criteria were laid out by the following PECO components.

- **Population of interest:** parents and caregivers of children aged 0-8 years and children aged 0-8 years. Studies involving birth parents, adoptive parents, and formal caregivers (e.g., childcare workers, early childhood educators) were eligible for inclusion. Studies involving parents of children aged 0-18 years were eligible for inclusion if they reported results for children under 8 years. Studies reporting results only for adolescent/teenage youth or children over 8 years were excluded.

- **Exposure** (risk factor): the COVID-19 pandemic.
- **Comparators:** given the nature of the pandemic, it was not expected that there would be a comparator group in most of the articles.
- **Outcomes:** reported nurturing care practices and conditions during the pandemic related to 1) *responsive caregiving* (e.g., skin-to-skin contact, kangaroo care, rooming-in for mothers and infants, responsive feeding, parent-child interactions, attachment and bonding, caregiver sensitivity and responsiveness, caregivers' mental health, care role and support by fathers and other family members, and social support from families, community groups and faith communities); 2) *opportunities for early learning* (e.g., early learning and academic skills, emotional and behavioral development, engagement in play, reading and online learning tools, interaction with peers and others outside the household, physical activity, participation in childcare, preschool or pre-primary); and 3) *safety and security* (e.g., child injury, harsh discipline, intimate partner and family violence, child poverty, caregiver unemployment, cash or in-kind transfers, social insurance).

Data Management & Screening. Identified records from database searches and website reviews were exported to and screened using Endnote software. For website reviews, an excel log was utilized to capture the date of review and how many resources were identified and basic information about the resource, such as topic area and country or region of focus. After removing duplicates, titles and abstracts of remaining records from all search routes were screened against the eligibility criteria by a single experienced reviewer for application of inclusion criteria, with verification of a subset of records by a second reviewer. Disagreements were discussed until consensus was reached. Following screening, retained

records were exported to Zotero for management during the extraction phase. During extraction, the reference lists of included studies were reviewed for additional literature to be screened against the inclusion criteria. Any such records were added to the Zotero file.

Data extraction. Articles that met the inclusion criteria were managed using Zotero and analyzed using a data extraction tool developed in Excel. The form was developed after initial screening of articles, piloted independently with a random sample of five articles before the form was finalized. This included, but was not limited to investigators/authors, setting, details of methods and data collection, participants, outcomes, results, and conclusions as they relate to nurturing care practices and conditions. Data extraction was guided by Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) checklist items. A single reviewer extracted data and a second reviewer checked a subset of extractions for accuracy.

Table 1 Search terms

SEARCH TERMS	
COVID-RELATED	(coronavirus OR covid19 OR covid-19 OR SARS-Cov-2 OR 2019-nCoV OR pandemic)
	AND
	(
NURTURING CARE	(nurturing care OR early childhood development OR early childhood OR child development)
	OR
RESPONSIVE CAREGIVING	(Skin-to-skin contact OR kangaroo care OR breastfeeding OR infant care OR kangaroo mother care OR bonding OR attachment OR responsive parenting OR parent-child relations OR stimulation OR social support OR care role OR caregiver burden OR ((mental health OR stress OR anxiety OR depression OR coping) AND (parenting OR parents OR caregivers OR mothers OR fathers OR early childhood educators OR teachers)))
	OR
EARLY LEARNING	(early childhood education OR play OR early learning OR homeschooling OR preschool OR pre-primary OR childcare OR physical activity OR distance learning OR physical activity)
	OR
SAFETY AND SECURITY	(child protection OR child maltreatment OR child abuse OR neglect OR family violence OR domestic violence OR violence against children OR ((injury OR physical abuse OR poverty OR job loss OR unemployment OR cash transfer) AND (child OR children OR parents OR mothers OR fathers OR caregivers OR early childhood educators OR teachers)))
)