

S5. Comparison of the methodologies described in PROSPERO and in the published systematic reviews

Table 4: Comparison of the methodology between protocols in our PROSPERO sample for which we also identified a full text publication by 05/05/2021 with their assigned full text publication

	Author, Year	PROSPERO registration	Published systematic review	Differences between PROSPERO registration and published systematic review*
1.	Frazer, 2020 Link to the PROSPERO: 191569 Link to the fulltext: https://dx.doi.org/10.1101/2020.10.19.20222182	<u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> PubMed, EMBASE, CINAHL and the Cochrane Library, MedRxiv and Google Scholar <u>Predefined risk of bias:</u> Narrative summary of methodological quality (first version: Cochrane RoB tool and CASP) <u>Predefined main outcomes:</u> Not specified	<u>Review type/methodology:</u> Rapid systematic review (preprint) <u>Databases searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, MedRxiv <u>Risk of bias:</u> MMAT <u>Main outcomes:</u> Morbidity data, case fatality rates, reductions in reported transmission rates, and facility characteristics associated with COVID-19 incidence	1) Rapid review methodology (instead of predefined systematic review) 2) Risk of bias assessment tool changed => no impact because it's a reliable tool 3) Main outcomes: Outcomes were not predefined in the protocol Overall: Some concerns regarding the selection of the reported results
2.	Juneau, 2020 Link to the PROSPERO: 198462 Link to the fulltext: https://dx.doi.org/10.1101/2020.07.23.20160234	<u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> Medline, EMBASE, Global Health, EBM Reviews <u>Predefined risk of bias:</u> Grouping of studies based on design into higher quality (randomized trials) and lower quality (other designs) <u>Predefined main outcomes:</u> R ₀ and other measures of transmission	<u>Review type/methodology:</u> Systematic review (preprint) <u>Databases searched:</u> Medline, EMBASE, Global Health, EBM Reviews <u>Data synthesis:</u> Tabular description of study characteristics and main findings <u>Risk of bias:</u> Risk of bias was not assessed <u>Main outcomes:</u> Contact tracing effectiveness in the context of COVID-19	1) Risk of bias was not assessed as indicated in the PROSPERO registration => Impacts the validity of the review results 2) Main outcomes differed slightly in their definition => most likely has no impact on the published systematic reviews Overall: Some concerns regarding missing risk of bias assessment.
3.	Chisale, 2020 Link to the PROSPERO: 204984 Link to the fulltext: https://dx.doi.org/10.21203/rs.3.rs-98441/v1	<u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> PubMed, EMBASE, PsycINFO, AMED, CINAHL, DOAJ, Medline and Google Scholar <u>Predefined risk of bias:</u> MMAT <u>Predefined main outcomes:</u> Reduction in the incidence of COVID-19	<u>Review type/methodology:</u> Systematic review (preprint) <u>Databases searched:</u> PubMed, EMBASE, PsycINFO, AMED, CINAHL, DOAJ, Medline and Google Scholar <u>Risk of bias:</u> MMAT <u>Main outcomes:</u> To identify community-based interventions used to prevent COVID-19 in low- and middle-income countries	Main outcomes: Outcomes changed Overall: Some concerns regarding the selection of the reported result

4.	<p>Public Health England, 2021</p> <p>Link to the PROSPERO: 191867</p> <p>Link to the fulltext (Update 2): https://phe.koha-ptfs.co.uk/cgi-bin/koha/opac-retrieve-file.pl?id=9adedb17d5622f9cd7e42febcbadb19ad</p> <p>original version: https://ukhsa.koha-ptfs.co.uk/cgi-bin/koha/opac-de-tail.pl?biblionumber=62728&query_desc=covid%20school</p>	<p><u>Review type:</u> Rapid Review</p> <p><u>Predefined databases to be searched:</u> Medline, EMBASE, MedRxiv, WHO COVID-19 Research Database and Google Scholar</p> <p><u>Predefined risk of bias:</u> Evaluation of papers based on study design and main sources of bias, validated tools will not be used for primary studies</p> <p><u>Predefined main outcomes:</u> SARS-CoV-2 infection rate in children and staff, transmission of SARS-CoV-2 within school settings, COVID-19 outbreaks in schools.</p>	<p><u>Review type/methodology:</u> Rapid review (Online document without external peer-review)</p> <p><u>Databases searched:</u> Medline, EMBASE, MedRxiv, WHO COVID-19 Database (2-weekly updates) and Google Scholar (first version only)</p> <p><u>Risk of bias:</u> Quality criteria checklist for primary research</p> <p><u>Main outcomes:</u> SARS-CoV-2 infection rate in children and staff, transmission of SARS-CoV-2 within school settings, COVID-19 outbreaks in schools</p>	<p>No changes in the review methodology were identified.</p> <p>Overall: No major concerns.</p>
5.	<p>Chu, 2020</p> <p>Link to the PROSPERO: 177047</p> <p>Link to the fulltext: https://dx.doi.org/10.1016/S0140-6736(20)31142-9</p>	<p><u>Review type:</u> Rapid systematic review</p> <p><u>Predefined databases to be searched:</u> PubMed, Medline, EMBASE, CINAHL, and the Cochrane Library, three Chinese databases and four COVID-19 specific databases (e.g., COVID-19 WHO, COVID-19 L-OVE), two platforms for trial registries</p> <p><u>Predefined risk of bias:</u> Cochrane RoB tool for RCTs and Newcastle-Ottawa Scale for non-RCTs</p> <p><u>Predefined main outcomes:</u> Transmission (confirmed or probable), acceptability, harms, COVID-19 infection, ICU admission and other main outcomes</p>	<p><u>Review type/methodology:</u> Systematic review with meta-analysis (peer-reviewed journal publication)</p> <p><u>Databases searched:</u> PubMed, Medline, EMBASE, CINAHL, and the Cochrane Library, four COVID-19 specific databases, WHO ICTRP, ClinicalTrials.gov</p> <p><u>Risk of bias:</u> Newcastle-Ottawa Scale was used for non-RCTs</p> <p><u>Main outcomes:</u> Risk of transmission (confirmed or probable; COVID-19, SARS or MERS), hospitalization, ICU admission, death, time to recovery, and other main outcomes (similar to the PROSPERO entry)</p>	<p>The review type changed (improved) from Rapid review to Systematic review.</p> <p>Overall: No major concerns.</p>
6.	<p>Johanna, 2020</p> <p>Link to the PROSPERO: 190546</p> <p>Link to the fulltext: https://dx.doi.org/10.4081/jphr.2020.2011</p>	<p><u>Review type:</u> Rapid systematic review</p> <p><u>Predefined databases to be searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, ScienceDirect, ProQuest, WHO SEARO database, Scopus, Wiley Library, Sage Journals, Taylor&Francis, SpringerLink, Hindawi, DOAJ</p> <p><u>Predefined risk of bias:</u> EPHPP tool</p> <p><u>Predefined main outcomes:</u> Incident cases, onward transmission, mortality, resource use</p>	<p><u>Review type/methodology:</u> Systematic review (peer-reviewed journal publication)</p> <p><u>Databases searched:</u> Medline, Cochrane Library, CINAHL, DOAJ, ProQuest, Sage Journals, Science Direct, Pubmed, Scopus, WHO Global Index Mediscus, Wiley Library, clinical trial registries</p> <p><u>Risk of bias:</u> EPHPP tool</p> <p><u>Main outcomes:</u> Incident cases, onward transmission, mortality, resource use</p>	<p>1) The review type changed (improved) from rapid review to systematic review.</p> <p>2) The number of databases for the literature search was slightly reduced, but main databases covered.</p> <p>Overall: No major concerns.</p>

7.	<p>Al-Moraissi, 2020 Link to the PROSPERO: 192912 Link to the fulltext: https://dx.doi.org/10.1101/2020.11.20.20235333</p>	<p><u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> Medline, EMBASE, CINAHL, CENTRAL, and Scopus <u>Predefined risk of bias:</u> Authors only referred to the GRADE assessment. <u>Predefined main outcomes:</u> Effectiveness of PPE against COVID-19 (not further predefined)</p>	<p><u>Review type/methodology:</u> Systematic review (preprint) <u>Databases searched:</u> Medline, EMBASE, CINAHL, CENTRAL, and Scopus <u>Risk of bias:</u> Because there was extreme heterogeneity among the included studies, RoB assessment was not conducted <u>Main outcomes:</u> Effectiveness of PPE against COVID-19 (not further defined)</p>	<p>No changes in the methodology were identified. Overall: No major concerns.</p>
8.	<p>Bertoncello, 2020 Link to the PROSPERO: 180264 Link to the fulltext: https://www.researchgate.net/publication/346967846 <i>Personal Protective Equipment to Prevention of COVID-19 in Health Workers A Review</i> (Note: The CRD was not provided in the fulltext. However, by a comparison of PICO, methodology and authors, we could assign this review to the PROSPERO entry)</p>	<p><u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> PubMed, Virtual Health Library, SciELO Brazil, Web of Science, Google Scholar (three first pages), CAPES portal <u>Predefined risk of bias:</u> Authors only referred to the GRADE assessment, ROBINS-I for observational studies <u>Predefined main outcomes:</u> COVID-19 infection</p>	<p><u>Review type/methodology:</u> Review (peer-reviewed journal publication) <u>Databases searched:</u> Pubmed, Virtual Health Library, SciELO Brazil, Scopus, Web of Science, Google Scholar (three first pages) <u>Risk of bias:</u> Not assessed <u>Main outcomes:</u> an outcome in the safety of health workers</p>	<p>1) The review type changed from systematic review to a (non-systematic) "Review" in a peer-reviewed journal article. 2) GRADE assessment of certainty of the evidence was not conducted (meta-analysis was not deemed possible) 3) The outcome changed substantially Overall: Some concerns regarding the selection of the reported result</p>
9.	<p>Morales Ferrer, 2020 Link to the PROSPERO: 188674 Link to the fulltext: https://dx.doi.org/10.31219/osf.io/uz4rs</p>	<p><u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> COVID-19 L-OVE, Medline, CENTRAL, EMBASE, WHO ICTRP <u>Predefined risk of bias:</u> RoB 2.0 for RCTs, ROBINS-I for non-RCTs <u>Predefined main outcomes:</u> COVID-19 cases</p>	<p><u>Review type/methodology:</u> Living systematic review (preprint) <u>Databases searched:</u> COVID-19 L-OVE <u>Risk of bias:</u> Joanna Briggs Institute Checklist for Analytical Cross Sectional Studies <u>Main outcomes:</u> COVID-19 cases</p>	<p>1) The review type changed (improved) to Living systematic review, 2) CENTRAL (not included in COVID-19 L-OVE) was not searched Overall: No concerns</p>
10.	<p>Khera, 2020 Link to the PROSPERO: 204466 Link to the fulltext: https://dx.doi.org/10.21203/rs.3.rs-97073/v1</p>	<p><u>Review type:</u> Systematic review and meta-analysis <u>Predefined databases to be searched:</u> CENTRAL, Medline, ClinicalTrials.gov, preprint servers <u>Predefined risk of bias:</u> Cochrane RoB-2 for RCTs, ROBINS-I for observational studies <u>Predefined main outcomes:</u> Mortality, number of cases</p>	<p><u>Review type/methodology:</u> Systematic review and meta-analysis (preprint) <u>Databases searched:</u> Medline, Cochrane Library, ClinicalTrials.gov <u>Risk of bias:</u> Not reported <u>Main outcomes:</u> Mortality, number of cases</p>	<p>1) Risk of bias was not assessed, neither using RoB-2 nor ROBINS-I as was the plan. Overall: Some concerns regarding missing risk of bias assessment.</p>

11.	<p>Singh, 2021 Link to the PROSPERO: 185220 Link to the fulltext: https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013587.pub2/full</p>	<p><u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> CENTRAL, Medline, EMBASE, controlled-trials.com, COVID-NMA.com, Cochrane COVID-19 Study register <u>Predefined risk of bias:</u> Cochrane RoB tool <u>Predefined main outcomes:</u> Cases (confirmed), production of antibodies to SARS-CoV-2</p>	<p><u>Review type/methodology:</u> Cochrane review <u>Databases searched:</u> CENTRAL, Medline, EMBASE, controlled-trials.com, WHO ICTRP, COVID-NMA.com, Cochrane COVID-19 Study Register <u>Risk of bias:</u> No eligible trials were identified <u>Main outcomes:</u> Cases (confirmed), production of antibodies to SARS-CoV-2</p>	<p>No changes in the methodology were identified.</p> <p>For the second objective of this systematic review (prevention of COVID-19), no eligible trials were identified. Therefore, no data synthesis or risk of bias assessment was conducted.</p> <p>Overall: No major concerns.</p>
12.	<p>Bassatne, 2021 Link to the PROSPERO: 203960 Link to the fulltext: https://dx.doi.org/10.1016/j.metabol.2021.154753</p>	<p><u>Review type:</u> Systematic review and meta-analysis <u>Predefined databases to be searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, ClinicalTrials.gov, WHO primary trial registries <u>Predefined risk of bias:</u> Cochrane RoB tool (version 1) for clinical trials, Newcastle-Ottawa quality scale for observational studies <u>Predefined main outcomes:</u> Mortality</p>	<p><u>Review type/methodology:</u> Systematic review and meta-analysis (peer-reviewed journal publication) <u>Databases searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, ClinicalTrials.gov, WHO primary trial registries, Australian New Zealand Clinical Trial Registry (ANZCTR), Iranian Registry of Clinical Trials (IRCT) <u>Risk of bias:</u> Cochrane RoB tool (version 1) for clinical trials, Newcastle-Ottawa quality scale for observational studies <u>Main outcomes:</u> Mortality rate from COVID-19 infection</p>	<p>1) Four databases providing trial registries were additionally searched and 2) The main outcome was clearer defined in the final manuscript than was the case in the protocol.</p> <p>Overall: No major concerns.</p>
13.	<p>Burela, 2020 Link to the PROSPERO: 200641 Link to the fulltext: https://dx.doi.org/10.17843/rmpesp.2020.374.6330</p>	<p><u>Review type:</u> Systematic review <u>Predefined databases to be searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, Web of Science, LILACS, SciELO, Google Scholar, clinical trial registries, pre-print server <u>Predefined risk of bias:</u> Cochrane RoB tool for RCTs, Newcastle-Ottawa Scale for observational studies <u>Predefined main outcomes:</u> Any type of outcome measures that could reflect the prevention and clinical efficacy</p>	<p><u>Review type/methodology:</u> Systematic review <u>Databases searched:</u> Medline, EMBASE, CINAHL, Cochrane Library, Web of Science, LILACS, SciELO, Google Scholar, clinical trial registries, preprint repositories <u>Risk of bias:</u> No study was identified <u>Main outcomes:</u> Any type of outcome measures that could reflect the prevention and clinical efficacy</p>	<p>No changes in the methodology were identified.</p> <p>As no primary study was deemed eligible for inclusion, no data synthesis and no risk of bias assessment were conducted.</p> <p>Overall: No major concerns.</p>

AMED=Allied and Complementary Medicine Database; CASP=Critical Appraisal Skills Programme; CENTRAL=Cochrane Central Register of Controlled Trials; CINAHL=Cumulative Index to Nursing and Allied Health Literature; COVID-19=Corona Virus Disease 2019; DOAJ=Directory of Open Access Journals; EBM=Evidence-Based Medicine; EPHPP=Effective Public Health Practice Project; GRADE=Grading of Recommendations, Assessment, Development and Evaluation; ICU=Intensive Care Unit; LILACS=Scientific health information from Latin America and the Caribbean countries

(translated abbreviation); MMAT=Mixed Methods Appraisal Tool; RCTs=Randomized Controlled Trials; RoB=Risk of Bias; ROBINS-I=Cochrane Risk of Bias In Non-Randomised Studies of Interventions; SARS-CoV-2=Severe Acute Respiratory Syndrome Corona Virus 2; SciELO=Scientific Electronic Library Online; SWiM=Synthesis without meta-analysis (reporting guideline for narrative data synthesis); WHO=World Health Organization; WHO ICTRP=World Health Organization International Clinical Trials Registry Platform; WHO SEARO=World Health Organization South-East Asia Regional Office

* Differences that may have impact on the validity of the published report are indicated.