

Supplementary Data 1. Supplementary materials

Methods of a rapid review

We used a rapid review approach, which refers to a streamlined systematic review within a compressed timeline. To conduct this review, we adopted the updated Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) 2020 statement using the 27-item checklist [4] and were also informed by Cochrane Collaboration guidelines [Higgins]. As the PRISMA is intended for conduction of systematic reviews, this study also consulted separate guidelines exclusive for rapid reviews where PRISMA was not readily applicable [5, 6]. This review included both quantitative and qualitative studies and the PRISMA 2020 is applicable to such mixed research reviews. Nevertheless, a separate reporting guideline for presentation and synthesis of qualitative data, the Enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) statement were also applied.

The rationale for the study was that there was much awareness of COVID-19 pandemic negatively impacting the effectiveness and outcome of existing TB services and interventions. Despite the widespread acknowledgment that COVID-19 is changing the dynamics of TB prevention and management, studies that review its impact on a full spectrum of TB prevention activities was little or non-existent.

Search protocol

[PubMed]

((("COVID-19"[Mesh] OR "SARS-CoV-2"[Text] OR "nCoV"[Text]) AND ("tuberculosis"[Mesh] OR "TB"[Text]) AND ("BCG"[Text] OR "tuberculosis case notification"[Text] OR "tuberculosis notification"[Text] OR "tuberculosis mortality"[Text] OR "tuberculosis death"[Text] OR "tuberculosis incidence"[Text] OR "burden"[Text] OR "latent tuberculosis"[Mesh] OR "latent tuberculosis"[Text] OR "incidence"[Mesh] OR "mortality"[Mesh] OR "registration"[Text] OR "contact tracing"[Mesh] OR "contact investigation"[Mesh] OR "contact screening"[Mesh] OR "screening"[Text] OR "screening programs"[Mesh] OR "screening programmes"[Text] OR "tuberculosis screening"[Text] OR "TB screening"[Text] OR "case finding"[Text] OR "TB/pc") NOT ("co-infection"[Text] OR "coinfection"[Text] OR "prognosis"[Mesh] OR "clinical"[Text] OR "clinical trial"[Mesh] OR "trial"[Text] OR "severity"[Text] OR "immuno*" [Text] OR "inflamma*" [Text] OR "antibody"[Text] OR "gastrointestinal tuberculosis"[Text] OR "miliary tuberculosis"[Text] OR "DNA"[Mesh] OR "RNA"[Mesh] OR "protease"[Text] OR "case reports"[Mesh] OR "sequelae"[Text] OR "case report"[Text]))

[Embase]

('covid-19'/exp OR 'covid-19' OR 'sars-cov-2'/exp OR 'sars-cov-2' OR 'ncov') AND ('tuberculosis'/exp OR 'tuberculosis' OR 'tb'/exp OR 'tb') AND ('bcg'/exp OR 'bcg' OR 'tuberculosis case notification' OR 'tuberculosis notification' OR 'tuberculosis mortality'/exp OR 'tuberculosis mortality' OR 'tuberculosis death' OR 'tuberculosis incidence' OR 'latent tuberculosis'/exp OR 'latent tuberculosis' OR 'incidence'/exp OR 'incidence' OR 'mortality'/exp OR 'mortality' OR 'registration'/exp OR 'registration' OR 'contact examination'/exp OR 'contact examination' OR 'contact tracing'/exp OR 'contact tracing' OR 'screening'/exp OR 'screening' OR 'tb screening' OR 'contact screening' OR 'screening program'/exp OR 'screening program' OR 'contact investigation' OR 'case finding'/exp OR 'case finding') NOT ('co-infection'/exp OR 'co-infection' OR 'coinfection'/exp OR 'coinfection' OR 'prognosis'/exp OR 'prognosis' OR 'clinical'/exp OR 'clinical' OR 'clinical trial'/exp OR 'clinical trial' OR 'trial'/exp OR 'trial' OR 'severity'/exp OR 'severity' OR 'immuno*' OR 'inflamma*' OR 'antibody'/exp OR 'antibody' OR 'gastrointestinal tuberculosis'/exp OR 'gastrointestinal tuberculosis' OR 'miliary tuberculosis'/exp OR 'miliary tuberculosis' OR 'dna'/exp OR 'dna' OR 'rna'/exp OR 'rna' OR 'protease'/exp OR 'protease' OR 'case reports' OR 'sequelae' OR 'case report'/exp OR 'case report')

Search strategy checklist

Peer Review of Electronic Search Strategies (PRESS) 2015 checklist search strategy checklist

	PRESS Checklist items	Application in the current review
Translation of the research question	<ul style="list-style-type: none"> • Does the search strategy match the research question/PICO? • Are the search concepts clear? • Are there too many or too few PICO elements included? • Are the search concepts too narrow or too broad? • Does the search retrieve too many or too few records? • Are unconventional or complex strategies explained? 	<p>√ All PICO(SPICE) elements included in the search protocol</p> <p>√ (E) element included all outcome measures, which include BCG vaccination, management of latent TB, TB surveillance, TB screening, TB case finding, and TB contact tracing</p>
Boolean and proximity operators (these vary based on search service)	<ul style="list-style-type: none"> • Are Boolean or proximity operators used correctly? • Is the use of nesting with brackets appropriate and effective for the search? • If NOT is used, is this likely to result in any unintended exclusions? • Could precision be improved by using proximity operators (e.g., adjacent, near, within) or phrase-searching instead of AND? • Is the width of proximity operators suitable (e.g., might adj5 pick up more variants than adj2)? 	<p>√ Boolean operators AND, OR, NOT used correctly</p> <p>√ Any errors in the use of nesting brackets fixed</p> <p>√ NOT used for exclusion of studies agreed through initial exclusion criteria</p> <p>√ proximity operators not used for the search results to be as broad as possible, taking into account the nature of the study topic</p>
Subject headings (database-specific)	<ul style="list-style-type: none"> • Are the subject headings relevant? • Are any relevant subject headings missing; e.g., previous index terms? • Are any subject headings too broad or too narrow? • Are subject headings exploded where necessary and vice versa? • Are major headings (“starring” or restrict to focus) used? If so, is there adequate justification? • Are subheadings missing? • Are subheadings attached to subject headings? (Floating subheadings may be 	<p>√ Subject headings were exploded where necessary</p> <p>√ Subject headings and terms in free text used together, when necessary</p> <p>√ Subheadings (subheading abbreviations) attached to subject headings, when necessary</p>

	<p>preferred.)</p> <ul style="list-style-type: none"> • Are floating subheadings relevant and used appropriately? • Are both subject headings and terms in free text used for each concept? 	
Text word searching (free text)	<ul style="list-style-type: none"> • Does the search include all spelling variants in free text (e.g., UK versus US spelling)? • Does the search include all synonyms or antonyms (e.g., opposites)? • Does the search capture relevant truncation (i.e., is truncation at the correct place)? • Is the truncation too broad or too narrow? • Are acronyms or abbreviations used appropriately? Do they capture irrelevant material? Are the full terms also included? • Are the keywords specific enough or too broad? Are too many or too few keywords used? Are stop words used? • Have the appropriate fields been searched; e.g., is the choice of the text word fields (.tw.) or all fields (.af.) appropriate? Are there any other fields to be included or excluded (database-specific)? • Should any long strings be broken into several shorter search statements? 	<p>√Search included US/UK spelling variants, when applicable (e.g. programs/programmes)</p> <p>√Full terms and abbreviations both used in the search (e.g. TB and Tuberculosis)</p> <p>√ Search included synonyms, when applicable</p> <p>√Truncation was used when necessary and appropriately</p>
Spelling, syntax and line numbers	<ul style="list-style-type: none"> • Are there any spelling errors? • Are there any errors in system syntax; e.g., the use of a truncation symbol from a different search interface? • Are there incorrect line combinations or orphan lines (i.e., lines that are not referred to in the final summation that could indicate an error in an AND or OR statement)? 	<p>√Authors checked for any spelling errors and protocol syntax errors</p>
Limits and	<ul style="list-style-type: none"> • Are all limits and filters used appropriately and are they relevant given the 	<p>√No limits or filters were applied on year, region,</p>

filters	research question? <ul style="list-style-type: none">• Are all limits and filters used appropriately and are they relevant for the database?• Are any potentially helpful limits or filters missing? Are the limits or filters too broad or too narrow? Can any limits or filters be added or taken away?• Are sources cited for the filters used?	and population √Search terms were to be included in title or abstract, to optimize search results
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