What is the impact of long term COVID-19 on workers in healthcare settings? A rapid review of current evidence. [Protocol]

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Citation

Review question

The objective of this systematic rapid review is to assess the effects of long COVID among healthcare workers and its impact on their self-reported health status, professional working lives, personal circumstances and use of health services

Searches

A range of clinical and social science databases will be searched, including MEDLINE, Embase, CINAHL, Web of Science, PsycINFO, and ASSIA. There will be no restriction on language or study type at the search stage. Results will be limited to those published from December 2019. The reference lists of all studies selected for full text appraisal will be screened for additional studies. Conference abstracts and pre-print papers will be identified from Embase, the Science and Social Science Conference Proceedings Citation Indexes, medRxiv, and PsyArXiv and recorded separately.

Ovid MEDLINE draft search

1 exp *Health Personnel/

2 ((health care or healthcare or medical or clinic* or hospital? or health service* or care or nursing or general practice or family practice or mental health or psychiatric or psychology or outpatient or pharmacy or dental or community or intermediate care or rehabilitation or ancillary or domestic or estates or non-medical or non-clinical or administrat* or support) adj3 (worker* or professional* or staff or practitioner* or employee* or personnel or assistant or workforce or student)).tw, kf.

3 (doctor? or physician? or clinician? or paramedic? or nurse? or surgeon? or consultant? or therapist? or practitioner? or radiographer? or dieti* or physiotherapist? or chiropodist? or podiatrist? or orthoptist? or osteopath? or paramedic? or prosthetist? or orthotist? or psychologist? or psychiatrist? or scientist? or "health visitor?" or midwi#e).tw, kf.

4 1 or 2 or 3

5 (((long or chronic or persist* or residual or post or postacute or postinfec* or postvir* or relaps*) adj3 (covid* or coronavirus* or Cov or "SARS-CoV-2*" or "SARSCoV-2*" or "SARSCoV2*" or "SARS-CoV2*")) or long-haulers or postcovid*).tw, kf.

6 4 and 5

Types of study to be included

Eligible studies will be those assessing i) the experiences and views of healthcare workers with symptoms of long COVID as well as ii) the impact of long COVID symptoms on health status, working performance, personal circumstances and use of healthcare resources. We anticipate that most of the studies will provide qualitative data (e.g.

surveys, interviews, focus groups) but there are no restrictions in terms of eligible study designs and both qualitative and quantitative assessments of long COVID in healthcare workers will be considered for inclusion. Studies will be need to be written in English, published from December 2019 onwards in a peer-reviewed journal and assessing participants with long COVID. Opinions and commentaries will be excluded. Abstracts will be considered eligible for inclusion subject to the body of evidence identified (only if too few full-text reports are identified).

Condition or domain being studied

Long COVID (i.e. signs and symptoms from 4 weeks after acute COVID-19)

Participants/population

The eligible population will be healthcare workers with symptoms of long COVID. All clinical and non-clinical staff will be eligible for inclusion, for example, cleaners, domestic staff, receptionists, estate workers. Social care staff and staff of care homes and other long-term care facilities will not be considered eligible for inclusion. However, these staff members may be included for completeness if the evidence base identified by the search strategies is insufficient for the purpose of this systematic review.

Intervention(s), exposure(s)

Eligible studies must report a definition of long COVID or criteria used to identify participants with long-COVID symptoms. We will accept any definition of long COVID reported by the studies' authors.

Comparator(s)/control

Not applicable

Context

Workers from any relevant clinical setting will be eligible for inclusion (e.g., primary care, secondary care, independent contractors). Employment is not restricted to NHS practices but may include private health providers.

Main outcome(s)

Outcomes of interest are any symptoms of long COVID and/or their impact on working performance, personal circumstances and health care resource use.

Additional outcome(s)

Not applicable

Data extraction (selection and coding)

Titles and abstracts identified by the literature searches will be screened by one researcher against the pre-defined inclusion/exclusion criteria and double checked by a second researcher for accuracy. All potentially relevant reports will be retrieved in full and assessed for inclusion by two independent researchers. Reasons for excluding studies will be recorded. Two reviewers will independently extract data from each eligible study and interpret study findings.

A data extraction form will be developed and piloted for the purpose of this systematic review. From each included study the following information will be recorded: research question and setting, objectives and methods, demographic characteristics of participants, definition of long COVID, symptoms of long COVID, self-reported information on health status, effects of long COVID on working life or personal circumstances, use of healthcare services resources, and interpretation of findings from studies' authors. Qualitative reports will be grouped under emerging narratives and themes. At all stages, any disagreements will be resolved by discussion or arbitration by a third reviewer.

Risk of bias (quality) assessment

The methodological quality of the included studies will be assessed by a single researcher using the Quality of Reporting Tool (QuaRT). QuaRT consists of four domains (research question, participant selection and recruitment, data collection, analysis methods) assessing whether main methodological aspects are clearly and adequately described in the reports of published studies. Each domain can be answered as 'Yes', 'No' or 'Unclear'. An adequate description will correspond to a 'Yes' answer, while an inadequate description will correspond to a 'No' or an 'Unclear' answer.

Strategy for data synthesis

We will adopt a pragmatic approach to analysis. Findings of individual studies will be summarised narratively including commentaries of their interpretative accounts. A thematic synthesis using primarily a descriptive approach will be used to summarise the findings of qualitative studies. We will examine the included studies to identify the main prominent and recurrent themes, organise the findings under 'descriptive' thematic headings and produce a holistic interpretation of findings. Descriptions of the key points will be presented in summary tables.

Analysis of subgroups or subsets

Not applicable

Contact details for further information

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Organisational affiliation of the review

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Type and method of review

Narrative synthesis, Systematic review

Anticipated or actual start date

01 October 2021

Anticipated completion date [2 changes]

04 April 2022

Funding sources/sponsors

Robert Gordon University, UK

Conflicts of interest

Language

English

Country

Scotland

Stage of review

Review Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

COVID-19; Delivery of Health Care; Health Personnel; Humans; SARS-CoV-2

Date of registration in PROSPERO

29 October 2021

Date of first submission

29 October 2021

Stage of review at time of this submission [2 changes]

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	No

Revision note

The date of completion has been amended to reflect unanticipated time and resource pressures encountered to date

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

29 October 2021

03 February 2022

02 March 2022