

Key Clinical Research Questions Asked During Epidemic Respiratory Outbreaks: A Systematic Review of the Literature Published on SARS and MERS

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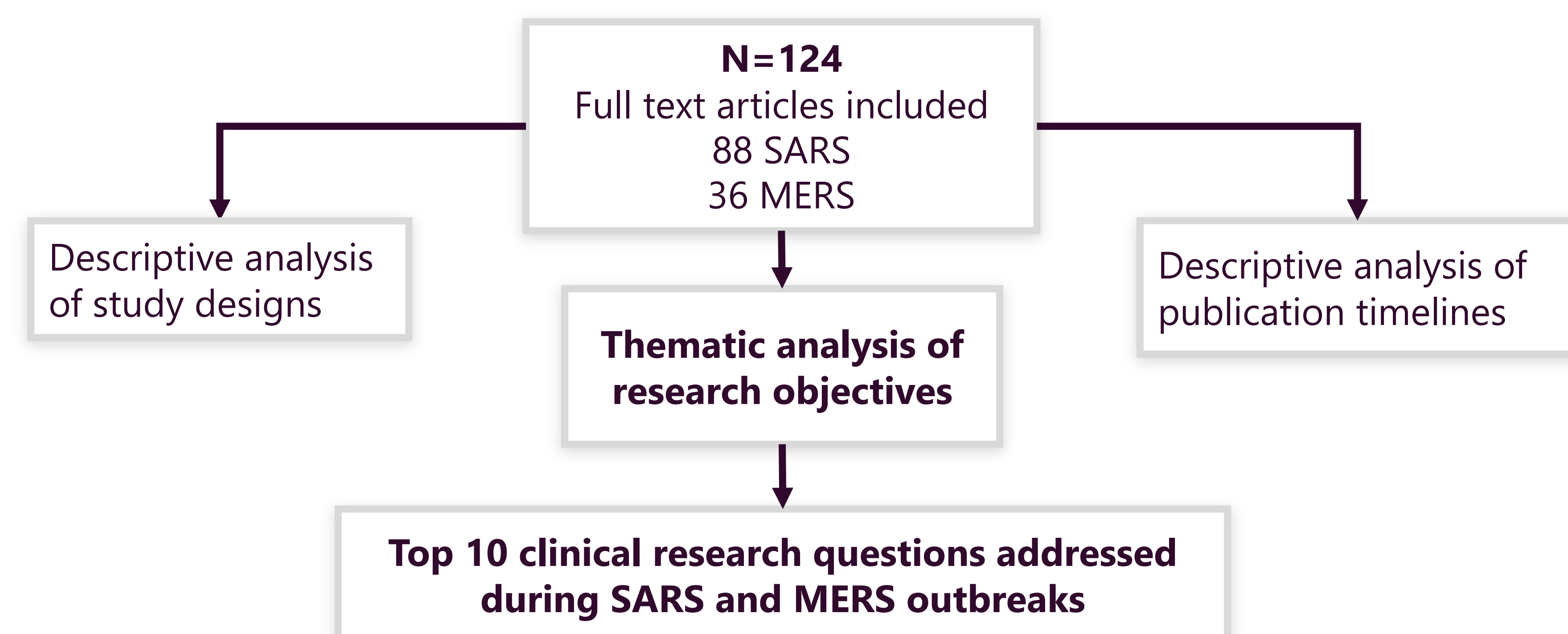
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Background

- Pre-planned, standardized research protocols are key to rapid collection of evidence in an outbreak or pandemic setting
- These protocols enable international harmonization of clinical data to inform public health practice
- This study provides an evidenced-based framework for identifying key clinical questions in coronavirus pandemics

Methods



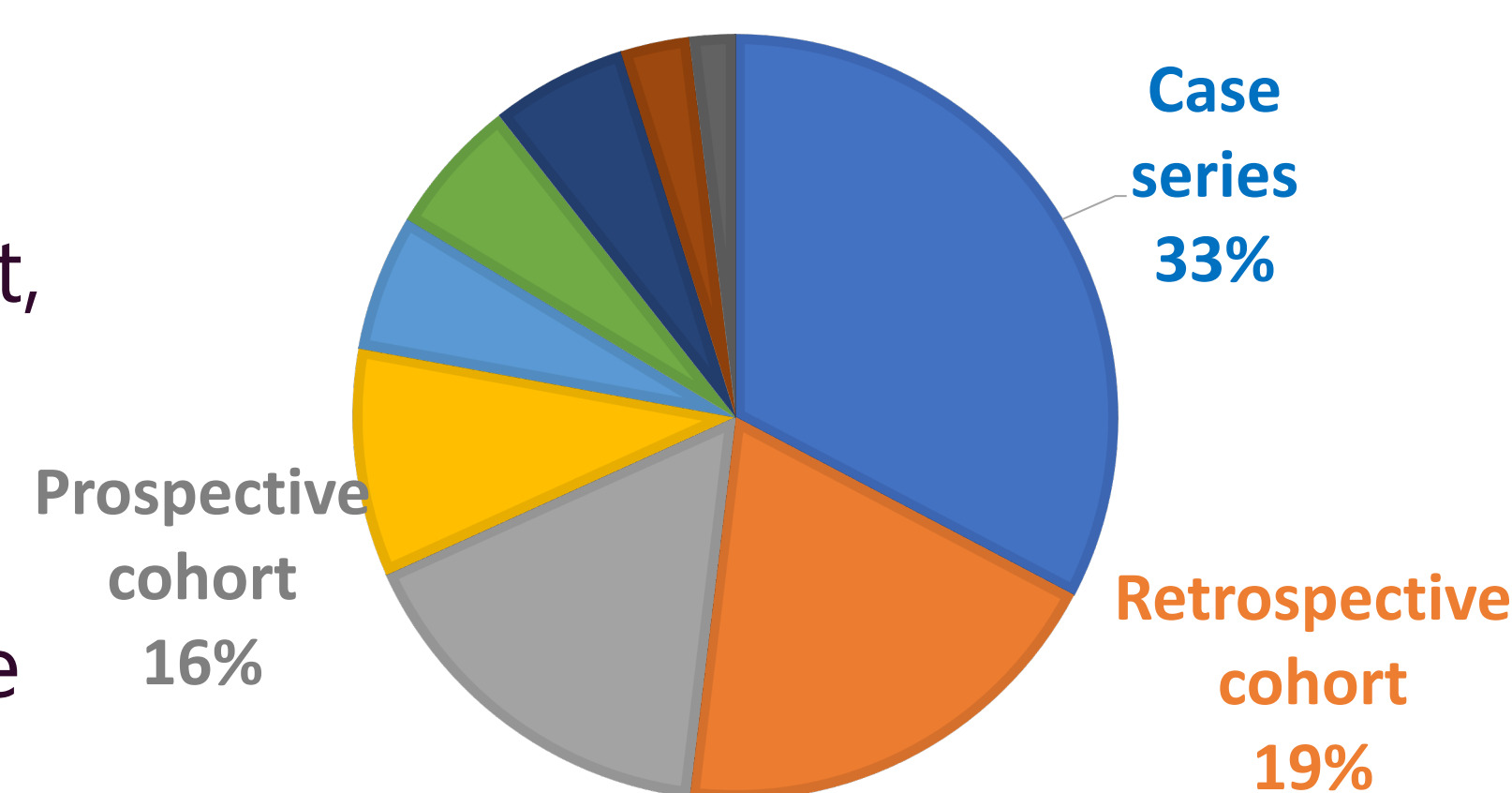
Extra results

Prevalence of study designs

- Top 3 study designs: Case series, retrospective cohort, prospective cohort

Publication timelines

- Only 16% of SARS studies were published during the pandemic to provide real-time evidence



In the context of COVID-19

Since the start of the pandemic, ISARIC, the WHO and international partners have implemented standardized research protocols for observational clinical studies, clinical trials, epidemiological studies, and more. The questions identified here could be used to expand on this work.

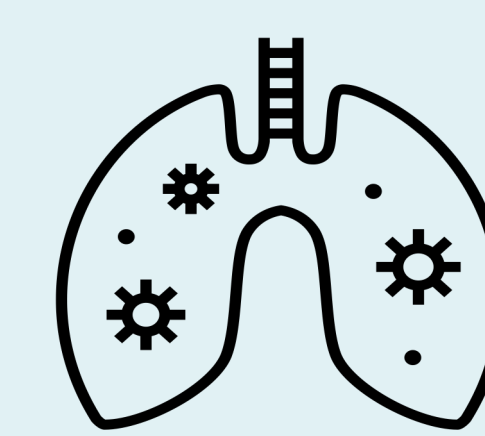
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations>

<https://isaric.tghn.org/>



10 key clinical research questions

define the SARS-CoV-1 and MERS-CoV literature. These should be used to create **standardized research protocols** and **harmonize data** in future outbreaks.



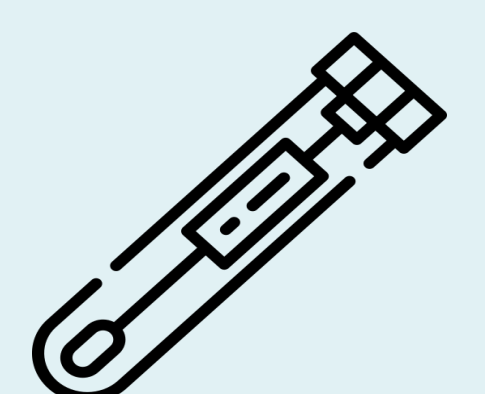
What is the clinical presentation and disease spectrum?



What are the risk factors for severe illness?



What treatments are effective?



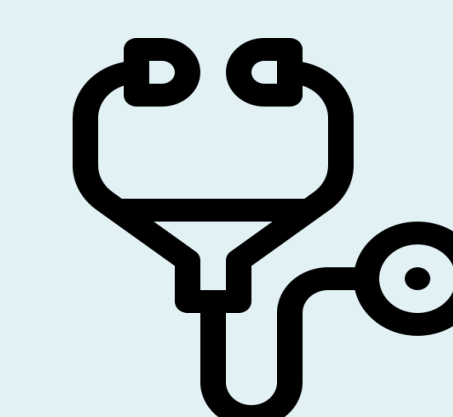
What is the optimal diagnostic test?



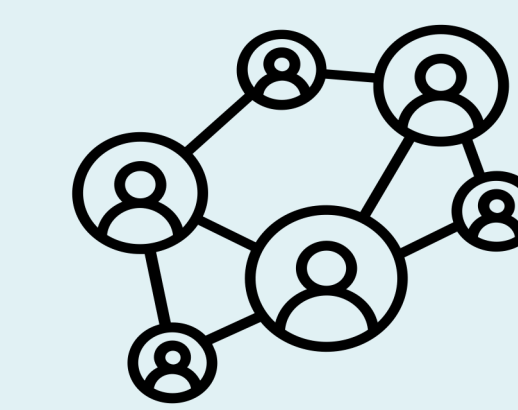
What is the duration of viral shedding?



What is the case definition?



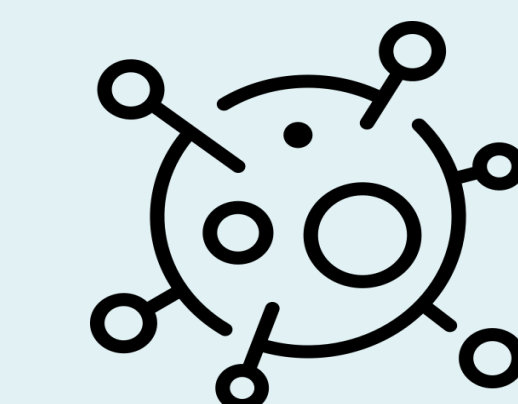
What risk factors pre-dispose healthcare workers to infection?



What risk factors exist in the population?



What are the psychosocial consequences of infection?



What is the causative agent?