Welcome

Covid UNCOVERed

Members of the UNCOVER Team
https://www.ed.ac.uk/usher/uncover

This session will begin at: 16:00 GMT
Audio check

• Can you hear the presenter talking?
• Please type **yes** or **no** in the “Text chat area”

• If you can’t hear
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  • Try signing out and signing back into the session
  • Type into the chat box and a moderator will try to assist you
Recording

Today's session is being recorded. Any information that you provide during a session is optional and in doing so you give us consent to process this information. *You will be emailed with a link to watch all sessions you have registered for within a week of the end of the event.*

These sessions will be stored by the University of Edinburgh for one year and published on our website after the event. Schools or Services may use the recordings for up to a year on relevant websites.

If you don't want your question or name read out in public, you can message the moderator in the private text chat.
Asking questions

• Please hold all questions until the end of the formal presentation

• Always use the “hand raise icon” to queue up your question

• When called upon by to ask your question, type it into the “Text chat area”

• Also type in who the question is for so that we can direct it to the right person.

• Once your question is answered, please lower your hand
Attending other sessions during the event

- Our admissions staff will be available daily during the event to chat via Live Text in the Virtual Exhibition and answer your questions.
- Live Text Q&A sessions for Fees, Funding & Scholarships also available.
- Book a slot for these and other sessions by clicking the 'Amend your booking' link in the confirmation email we sent you.
Introduction – Dr Ruth McQuillan (UNCOVER Co-Lead)

https://www.ed.ac.uk/usher/uncover
What is evidence synthesis?

Starts with a problem, often expressed as a big broad question

Careful examination of the problem and comprehensive search for relevant data

Evaluation and analysis of relevant data to create summary of what is known and where gaps may be
A systematic review and meta-analysis of severe COVID-19 risk among adults and children with severe asthma

Presenter: Nadege Atkins

Lead reviewers: Bohee Lee, Evropi Theodoratou, Ruth McQuillan
Reviewers: Eldad Agyei-Manu, Nadege Atkins, Urmila Bhattacharyya, Marshall Dozier, Grace Lewis
Purpose and Aim of Review

• A need for best evidence for the Joint Committee on Vaccines and Immunisation (JCVI) in the UK
• Severe asthma as a risk factor for severe COVID-19
Review process

- Rapid Review
- Preferred Reporting Items for Systematic Review and Meta-Analysis 2020 (PRISMA 2020)
- Search databases: Ovid MEDLINE(R), WHO Covid literature database, medRxiv
- Search terms: Asthma + COVID-19
Results

Records identified from:
- Databases (n = 2550)
  - Published (n=2460)
  - Preprints from Medrxiv (n=90)
- Registers (n = 0)

Records screened (n = 1843)

Reports sought for retrieval (n = 241)

Reports assessed for eligibility (n = 241)

Reports excluded: 232 studies
- Not relevant to severe asthma (n = 120)
- Wrong study design (n = 23)
- Wrong outcomes (n = 33)
- Not in English (n = 6)
- Duplicate (n = 3)
- No full-text (n = 15)
- Reviews (not systematic review) (n = 32)

Studies included in review (n = 9)

Records removed before screening:
- Duplicate (n = 707)

Records excluded (n = 1602)

Reports not retrieved (n = 0)

Countries

- UK: 6
- Europe (Netherlands, Spain): 5
- USA: 1
- Asia (South Korea): 1

Records excluded before screening:
- Duplicate (n = 707)
Results – Main Findings

• Adults with severe asthma have a 29% higher risk of COVID-19-related hospitalisation than those with mild asthma or no asthma.
• Adults with severe asthma have a 25% higher risk of COVID-19-related death than those with mild asthma or no asthma.
• Adults taking oral corticosteroid treatment for asthma have a 13% increased risk of COVID-19-related mortality.
Limitations

- No studies targeting children with asthma
- COVID-19 confirmation – not all studies used only RT-PCR test
Conclusions

• The first review examining associations between severe asthma defined by medication use and severe COVID-19-related outcomes

• Adults with severe asthma have a higher risk of death and hospitalisation from COVID-19 than those with mild asthma or no asthma.

• Adults with severe asthma taking OCS were associated with a higher risk of COVID-19-related death

• Urgent need for robust research for the paediatric population with severe asthma and associated COVID-19 outcomes.
Thank you for your attention
REFERENCES


Long COVID: Challenges to Evidence-Based Research

**Presenter:** Jasmin Rostron

**Lead Reviewers:** Evropi Theodoratou and Ruth McQuillan

**Reviewers (In alphabetical order):** Amir Kirolos, Damilola Iduye, Emilie McSwiggan, Emma Farfan de los Godos, Gwenetta Curry, Jasmin Rostron, Lara Goodwin, Madhurima Nundy, Marshal Dozier, Prerna Krishan, Wei Zu, Xiaomeng Zhang, Yijia Dong
March 2021

- Rising awareness and concern about ‘Long COVID’
- Commissioned by the Scottish Government
- Aimed to understand long-term implications of COVID-19

What is the prevalence of the post COVID-19 syndrome?
Rapid Review Process
1. Develop Search Strategy
2. Title and Abstract Screening
3. Full-Text Screening
4. Data Extraction
5. Quality Assessment
6. Synthesis & Analysis
7. Dissemination
Systematic Review Results

Reduced lung function (5 to 83%)
Headache (44%)
Dyspnoea (24 to 74%)

Fatigue (1.5 to 73%)

Mental Health (5 to 13%)

Neurological/Cognitive Symptoms (27 to 55%)
Challenges

- Timing
- Heterogeneity
- Quality
- Definitions
- Self-reported outcomes
- Representativeness
- Non-controlled studies
Reflections

- Ethical considerations
- Living systematic review
  1. High priority
  2. High uncertainty
  3. Emerging evidence
Thank you!

• Full Long COVID report:
  • https://www.ed.ac.uk/usher/uncover/our-output/long-covid

• Questions:
  • J.G.Rostron@sms.ed.ac.uk

• Coming up next:
  • COVID-19 in relation to influenza and respiratory syncytial virus: a collaboration with the World Health Organisation
  • Presented by Thulani Ashcroft and Bohee Lee
COVID-19 in relation to influenza and respiratory syncytial virus: reviews in collaboration with World Health Organisation

Presented by Thulani Ashcroft and Bohee Lee
WHO reviews

1. Integration of COVID-19 into influenza surveillance programme

2. Living review on the effect of the COVID-19 pandemic on influenza and respiratory syncytial virus
### What are common clinical features of COVID-19?

<table>
<thead>
<tr>
<th>Most common features:</th>
<th>Fever</th>
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<tbody>
<tr>
<td></td>
<td>Cough</td>
</tr>
<tr>
<td>Other prevalent features:</td>
<td></td>
</tr>
<tr>
<td>Loss of taste or smell</td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td></td>
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<tr>
<td>Loss of appetite</td>
<td></td>
</tr>
<tr>
<td>Shortness of breath</td>
<td></td>
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<tr>
<td>Hypoxia, and expectoration</td>
<td></td>
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</tbody>
</table>

### How did influenza-surveillance system detect COVID-19 cases?

Most common terms used in surveillance:
1. Influenza-Like Illness
2. Severe Acute Respiratory Infection

![Image of COVID-19 virus particles]
WHO review on effect of pandemic on influenza and RSV

Living reviews

- Changed in seasonality pattern of influenza and RSV
- **Public health measures** implemented to prevent SARS-CoV-2 transmission seem to influence influenza and RSV transmission.
- Increasing evidence on influenza vaccination rates

Image source: https://www.ashcroftmailingsolutions.co.uk/flu-season/
Developing our skills

- Knowledge on important health issues around the world
- Developed systematic review and critical appraisal skills
- Communication skills with stakeholders
- Strong teamwork skills
The UNCOVER student and staff working model

Dr Neneh Rowa-Dewar,
Student staff liaison UNCOVER.
Co-Director MPH, Director of Quality DMGPHS
Working together

• A shared purpose and priority
• Smaller staff, student and alumni review teams
• Participation in a larger, global and interdisciplinary network meeting twice a month
• Connecting regularly online
• Strong student voice within a responsive, supported and collaborative framework: peer mentors, a monthly student forum, workshops and open communication channels
Gains when joining UNCOVER

• Applying academic literature review skills to a real world priority while you study
• Disseminate to key stakeholders (e.g. WHO, Public Health Scotland, the Scottish Government)
• Associated with, and interacting within, a global network
• Publications, conference presentations, references and some paid opportunities such as internships
• Enhancing teamwork, leadership, supervision, presentation, grant/publication writing and mentoring skills, enhancing employment opportunities
A personal reflection on UNCOVER

Emilie McSwiggan
UNCOVER Project Manager

(Photo by Faye Cornish on Unsplash)
https://www.ed.ac.uk/usher/uncover
Explore our university and chat with our students!

- Virtualvisits.ed.ac.uk/
- edin.ac/student-chat
Follow-up questions?

• Get in touch with us here:
  • UNCOVER (The Usher Network for COVID-19 Evidence Reviews)
  • https://www.ed.ac.uk/usher/uncover
  • Usher.Uncover@ed.ac.uk
Thank you

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