Welcome

Covid UNCOVERed

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

This session will begin at: 16:00 GMT





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Start Recording

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Open to the world

Asking questions

- Please hold all questions until the end of the formal presentation
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- Once your question is answered, please lower your hand





| Say sor | nething | | : | • |
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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









Usher Institute UNCOVER (USHER NETWORK FOR COVID-19 EVIDENCE REVIEWS)

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





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

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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

- 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%)

Fatigue (1.5 to 73%)

Mental Health (5 to 13%)

Headache (44%) Dyspnoea (24 to 74%)

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:
- <u>https://www.ed.ac.uk/usher/uncover/our-output/long-covid</u>
- 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





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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







GLOBAL INFLUENZA PROGRAMME



Maintaining surveillance of influenza and monitoring SARS-CoV-2

adapting Global Influenza Surveillance and Response System (GISRS) and sentinel systems during the COVID-19 pandemic

INTERIM GUIDANCE

8 NOVEMBER 2020





WHO review on clinical features and case definitions

What are common clinical features of COVID-19?

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

| Most common features: | Fever | | |
|-----------------------------|------------------------|--|--|
| | Cough | | |
| | | | |
| Other | Loss of taste or smell | | |
| nrevalent | | | |

prevalent
features:Eoss of taste of smellFatigue
Loss of appetite
Shortness of breath
Hypoxia, and expectoration





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





WHO review on effect of pandemic on influenza and RSV



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



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





mage source: https://teamworkdefinition.com/teamworkfails/





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)









Usher Institute UNCOVER (USHER NETWORK FOR COVID-19 EVIDENCE REVIEWS)

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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