WHAT EVIDENCE ON VACCINE EFFECTIVENESS IN LONG-TERM CARE POPULATIONS HAS BEEN GENERATED?

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Social Care COVID recovery & resilience: learning lessons from international responses to the COVID-19 pandemic in Long-Term Care systems

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Aim: to monitor and summarise emerging evidence on the effects of COVID-19 vaccines in LTC users

Weekly searches of one academic literature database (MEDLINE via PubMed) between 22 February and 11 July 2021. One-off searches for Web of Science and CINAHL Plus on 11 May 2021

Included original research articles reporting on the effect of COVID-19 vaccines in users of LTC

Emerging evidence on effectiveness of Covid-19 vaccines among residents of LTC facilities: published research letter in JAMDA (findings as of 11 May 2021)
OVERVIEW OF AVAILABLE EVIDENCE

Few population-based studies to estimate vaccine effectiveness

- VIVALDI study (England): 10,412 residents; VE against infection: 56% at 28-34d, 62% at 35-48d.
- Rask-Mousten Helms et al. (Denmark): 39,040 residents; no protective effect against infection after 1st dose. VE against infection after 2nd dose: 52% after 0-7 days; 64% beyond
- Mazagatos et al. (Spain): 8,379 cases; VE among fully vaccinated: 71% against infection, 88% against hospitalisation, 97% against death

Other studies of the impact of vaccination programmes

- White et al. (United States): 22,232 residents; reductions in incident cases after vaccinations started also among unvaccinated
- Other ecological studies also showing lower rates of infection after start of vaccination programmes and after reaching immunisation thresholds

Outbreak reports and immune response studies

- Several reports of outbreaks at individual facilities with high proportion of vaccinated residents
- Immune response studies: typically single-centre, small patient numbers
WHAT EVIDENCE IS MISSING?

• Costs of lacking evidence?

• No evidence on vaccine effectiveness in long-term care population from pivotal trials

<table>
<thead>
<tr>
<th>Developer</th>
<th>Participants aged 65 and older</th>
<th>Participants aged 75 and older</th>
<th>Participants aged 85 and older</th>
<th>Participants with dementia diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>BioNTech / Pfizer</td>
<td>8,018 (21.89%)</td>
<td>1,616 (4.41%)</td>
<td>10 (0.03%)</td>
<td>18 (0.05%)</td>
</tr>
<tr>
<td>Gamaleya</td>
<td>2,144 (10.79%)</td>
<td>370 (1.86%)</td>
<td>34 (0.17%)</td>
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<tr>
<td>Johnson &amp; Johnson</td>
<td>8,561 (19.55%)</td>
<td>1,541 (3.52%)</td>
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<td>No information</td>
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<tr>
<td>Moderna</td>
<td>7,512 (24.75%)</td>
<td>1,399 (4.61%)</td>
<td>90 (0.30%)</td>
<td>No information</td>
</tr>
<tr>
<td>Oxford / AstraZeneca</td>
<td>660 (5.67%)</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
</tbody>
</table>

• Older people with multiple conditions are regularly excluded from clinical trials

• Without funding and regulatory incentives to generate relevant evidence, are we facing a repeat for the next infectious disease outbreak?
REFERENCES TO THE STUDIES MENTIONED


