

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

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

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PRAGMATIC REVIEW OF PUBLISHED STUDIES

- 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

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

- 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?

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