

How has the COVID-19 pandemic affected the health of Domiciliary Care Workers in Wales?

Prof Michael Robling & Dr Rebecca Cannings-John. Lead investigators, OSCAR Study, Centre for Trials Research, Cardiff University

About the research:

Registered domiciliary care workers support people to live independently at home. In 2020, mixed evidence emerged about how COVID-19 may impact infection and mortality for care workers due to the pandemic.

The OSCAR study used anonymised health records for 15,725¹ registered care workers in Wales to describe health outcomes during the pandemic. Interviews with care workers explored risks of exposure to COVID-19 and other health outcomes.

In December 2021, we reported health outcomes evident in the first months of the pandemic. In this new briefing we present health outcomes from 1st March 2020 to the end of November 2021, including how such outcomes compared to the pre-pandemic period.

Confirmed COVID-19 rates increased over time from 14% during the first two waves (1st March 2020 to 28th February 2021) to 24% by the end of November 2021. Infection rates varied by personal characteristics of care workers (lower in males and in older care workers), by where care workers lived (lower in health boards such as Powys and Hywel Dda, in rural areas, and in more affluent areas), and were higher for care workers employed by local authority social services departments compared to staff employed in the private sector). One third (34%) of all care workers required support for a mental health condition, with rates of attending a GP or receiving a relevant prescription increasing in frequency when compared to the four years preceding the onset of the pandemic.

Further evidence from our interviews focuses on the emotional impact of working during the pandemic, for example, due to concerns for care workers' own health, as well as for their family and their clients:

"Because when I came back after not being very well, I'd had a little bit of a wobble, because one of the people we go to was on oxygen, got ill, literally, a couple of days after I had got ill and I was a bit like, "Oh my God. I was in there. Have I given this to her?" Oh, and I got myself all in a bit of a state, because I was quite upset about it." ID23

🚳) OSCAR

¹Number of care workers differ from OSCAR policy briefing #1 due to further linkage opt-outs (N=15,727)

Interpretations and Policy implications:

Nearly one quarter of all care workers had a confirmed COVID-19 infection in the 21-month period from 1st March 2020. While this may prove to be higher than that for the general population, some of this may reflect higher rates of testing incumbent on social care staff. Nevertheless, initial concerns about overall excess mortality for community-based care workers appear unsupported (data not shown due to low numbers).

However, infection rates varied considerably based on characteristics and circumstances of care workers. Such differences may not be directly attributable to the working conditions of care workers. However, it does indicate that the risks for individuals employed as care workers remain a serious consideration for employers, for example, in the impact this may have with staff sickness or as a source of infection.

The study shines a focused light on the burden of mental ill health experienced by care workers during the pandemic. We have been able to identify the population of care workers accurately and comprehensively in Wales and to link to their health records. This adds considerable weight to rates of self-reported health and wellbeing that have been more typically recorded in previous studies. This burden has deepened over the last two years and is likely to extend well beyond any formal end of the pandemic and represents the latest shock to the system of community based social care.

Policy and organisational responses to support care workers were suggested in our initial briefing and their emergence is evident, for example, in the work of the regulatory body in Wales. Evidence from our own work and that of others supports the value in co-produced solutions which draw on the direct experiences of care workers. Systemic drivers (e.g. public funding for social care, staffing levels, levels of pay) and situational aspects of the role such as peripatetic working will not change quickly or even at all. There remain few evidence-based supportive approaches tailored to the circumstances of care workers. Rigorously adapting, developing and testing new approaches to support the sizeable community of care workers in the UK may offer considerable medium to long-term benefits beyond the pandemic and with consequent positive impact for their clients.

Our study has demonstrated the value of linking registration and health outcome data. Examining the longer-term health trajectory for the current cohort of care workers, and for successive cohorts will add value and tell us more about the effects of policy progression.

Key findings:

In the first two waves of the pandemic, confirmed COVID-19 rates were 14% amongst domiciliary care workers.² This compares to a rate of 7% in the Wales population of 15- to 64-year-olds.³ From March 2020 to the end of November 2021, the rate for care workers rose to 24%.

Rates of hospital admissions for respiratory infections not recorded as COVID-19 were similar to those in the pre-pandemic period. Thus, it is unlikely that the rate of serious presentations due to COVID-19 would have been importantly under-estimated due to unavailability of testing.

Differences in rates of confirmed COVID-19 emerged over the follow-up period. Males had lower rates than females (crude hazard ratio (95% confidence interval): 0.76 (0.69 to 0.84)) while care workers aged 55 years and older had lower rates compared to those aged under 35 years (0.68 (0.62 to 0.74)). Care workers employed by local authority social services had higher rates of COVID-19 compared to those in the private sector (1.23 (1.13 to 1.34)). COVID-19 rates varied by the health board area within which care workers resided, e.g., the lowest rates in Powys compared to Aneurin Bevan (0.53 (0.43 to 0.65)). Similarly, rates were higher for care workers living in urban compared to rural locations (1.38 (1.28 to 1.49)) and were lower in more affluent communities (e.g., 0.74 (0.65 to 0.83) for the most affluent areas compared to the most deprived). Compared to care workers of a healthy weight, those with a body mass index of 30 and over had higher rates of COVID-19 (1.27 (1.16 to 1.39)).

The mortality rate amongst care workers was no greater than that observed amongst the general population of 15- to 64-year-olds in Wales (which was $0.034\%^4$).

Rates of serious mental ill health at the start of the pandemic were 22%. Despite initial reductions in contacts related to mental ill health (e.g., in hospital admissions), trends in healthcare contact increased compared to pre-pandemic (i.e., March 2016 to March 2020) levels. One third of all care workers (34%) had a recorded contact for mental ill health at some point during the follow-up period. Compared to the pre-pandemic period, there was an increase in trend over time from April 2020 in rates of GP consultations and prescribing for mental ill health.

Further assessment of our interviews conducted between February and July 2021 focused on the mental well-being burden of working as a care worker during the pandemic. Care workers had concerns for themselves, their clients, and their own families. Impacts such as fear, stress, isolation and depression were evidenced as direct and indirect effects of the pandemic. The latter could arise due to both unplanned and planned changes to working practices driven by the pandemic.

"I was working a lot of hours and I was coming home, and sort of not really speaking to anyone, because I just found it quite difficult to sort of deal with" ID16

"it's not nice to tell a client 'sorry, I can't come and sit and chat to you today because of Covid', you know, because they're all so isolated already and now, ... the little bit of contact they might have you're taking away from them"iD01

² COVID-19 confirmed by earliest of a positive PCR test, GP diagnosis, hospital admission, or death registration. ³ COVID-19 confirmed by a positive PCR test. ⁴ COVID-19 related deaths in 15-to 64-year-olds in Wales (01Mar20-28Feb21) provided by Digital Health and Care Wales (Nov 2021).





Further information:

Study website: <u>https://www.cardiff.ac.uk/centre-for-trials-</u> research/research/studies-and-trials/view/oscar

Protocol paper: <u>https://doi.org/10.23889/ijpds.v5i4.1656</u>

OSF website: https://osf.io/u3zfj/

Preprint of Qualitative study of pandemic risks paper: https://osf.io/c2rdb/?pid=adyuv

OSCAR Policy Briefing #1 (Dec 2021): https://www.cardiff.ac.uk/__data/assets/pdf_file/0009/25 92900/OSCAR-Policy-Briefing-December-2021.pdf

OSCAR study team affiliations:

Cardiff University: Mike Robling, Rebecca Cannings-John, Lucy Brookes-Howell, Richard Haggerty, Kerenza Hood, Laura Johnson, Hywel Jones, Fiona Lugg-Widger, Huda Mohammed, Hayley Prout, Simon Schoenbuchner. Public Health Wales: Daniel Thomas. Swansea University: Ashley Akbari; Ann John.

Acknowledgements:

This grant is funded by the Economic & Social Research Council (ESRC), as part of UK Research & Innovation's rapid response to Covid-19 [ES/V015206/1].

This study makes use of anonymised data held in the Secure Anonymised Information Linkage (SAIL) Databank, project approval 1126. We would like to acknowledge all the data providers who make anonymised data available for research including Social Care Wales who provided the care worker workforce data. This work uses data provided by patients and collected by the NHS as part of their care and support #datasaveslives

With thanks to the OSCAR Study Advisory Group and the OSCAR Implementation Reference Group.

Contact the researchers:

Prof Mike Robling - Director, Population Health Trials, Centre for Trials Research, Cardiff University RoblingMR@cardiff.ac.uk

Dr Rebecca Cannings-John - Principal Research Fellow Centre for Trials Research, Cardiff University. CanningsRL@cardiff.ac.uk

> Dr Fiona Lugg-Widger - Research Fellow Centre for Trials Research, Cardiff University. LuggFV@cardiff.ac.uk