



What are the risks for Domiciliary Care Workers in Wales from COVID-19?

*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 15,727 registered domiciliary care workers in Wales to describe health outcomes in the first year of the pandemic. Interviews with care workers explored how the job role may contribute to risks of exposure to COVID-19 and of key health outcomes.

PCR-confirmed infection rates in the first full year of the pandemic were 12% although lower in males (9%) than for females (12%). Differences in infection rate by characteristics such as geographical location and employer - for example, 13% in urban settings and 9% in rural settings - require further assessment to determine whether these may be explained by differences in background rates in the general population. Fewer than 2% of care workers experienced serious respiratory infections not otherwise identified as COVID-19. However, 28% of care workers received care for mental health. Large differences were observed in rates of mental ill health, for example between males (20%) and females (29%), and between workers from different health board regions (e.g. 22% in Hywel Dda and 33% in Cwm Taf Morgannwg). The extent to which these represent pre-pandemic rates overall and how they compare to the broader community will be explored in our remaining work.

Our interviews with 24 care workers identified key risk areas, for example, access to and use of PPE, unrestricted presence and behaviours of others within client homes, variable employer support, and changes to employment role/status. Some risks were transitional with initial difficulties at pandemic onset, but with subsequent improvements. Some risks remained ongoing (i.e. need for tailored training) or with scope for further optimisation. The personal burden upon care workers working through the pandemic was apparent, as was the enhanced value and commitment to clients.

Policy implications:

- With over a quarter of care workers with evidence of mental ill health, there is a burden on the social care workforce that will require addressing at both organisation and policy level.
- Apparent differences in rates of mental ill health over time will be further explored but already identify current disparities in need.
- Rates of PCR confirmed COVID-19 infection unsurprisingly rose from wave 1 to wave 2 of the pandemic. This may reflect underlying rates of transmission but also increased surveillance by testing both within the profession and in the broader community.
- Further planned analysis involving a matched population sample will explore how infection rates compare with those reported in the broader community. Nevertheless, potentially elevated rates of infection may still have implications for vulnerable clients if recommended safety precautions are sub-optimal.
- Initial operational problems such as gaining access to adequate supplies of personal protective equipment, testing equipment and hospital discharge of clients generated concerns for care workers and represented potential sources of increased infection risk. Whilst in many cases resolved, there is an enduring need to maintain long-term plans for upsurges in COVID-19 and similar infection risks.
- Existing and newly introduced plans to reduce infection risk and support service delivery could be problematic. For example, a lack of contextual specificity for PPE design and use, inadequate risk assessments and insufficient role-specific training indicate a remaining need to optimise mitigation strategies with carers and their clients specifically in mind.
- There was a personal burden upon care workers, including team leaders driven by multiple factors such as a disrupted workforce organisation, staff availability, isolated working practices and uncertainties in the work environments. Individual carers may have less control over some of these factors which can have an immediate impact on care worker wellbeing. Strategies to support individuals and teams function in this environment are vital to mitigate the emotional burden of pandemic working for carers and ensure continuity of care.
- Findings from the qualitative interviews have been used to inform recommendations following a co-development process involving policy and practice stakeholder group (attached).

Key findings:

- During the first full year of the pandemic, the rate of PCR confirmed COVID-19 infection amongst 15,727 domiciliary care workers was 12% (n=1,834), with most cases occurring during the second wave (n=1,651) rather than the first (n=183). Infection rates differed between males (9%) and females (12%) while the workforce comprised mainly females (84% of all care workers). Differences in confirmed COVID-19 infection rate by characteristics such as geographical location (e.g. 13% in urban settings, 9% in rural settings) and employer (e.g. 11% in private sector, 16% in local authority) require further assessment to determine whether these may be explained by differences in background rates in the general population or other factors.
- Rates of serious respiratory infection not attributed to COVID-19, but which could have been influenced by undetected COVID-19 were low (2%).
- Care for mental health was received for 28% (n=4,401) of all care workers, suggesting a high level of need during the pandemic. Some differences were observed in rates of mental ill health between sub-groups of care workers, for example between males (20%) and females (29%), and between workers from different health board regions (e.g. 22% in Hywel Dda and 33% in Cwm Taf Morgannwg). The extent to which these represent pre-pandemic rates overall and the broader community will be explored in our remaining work.
- Across the four main themes emerging from the research interviews, various potential sources of infection risk to care workers were evident. These included management challenges evident at the onset of the pandemic such as the availability of suitable personal protective equipment and testing. In addition, pressures placed on provider organisations included disruption to workforce through absence and isolated working practices were articulated. Responsive and mitigation strategies such as bonus payments for carers, risk assessments and staff training were described but remained sub-optimally deployed and insufficiently tailored to the needs of carers or their work environment and practice.
- Carers remained motivated to support their clients but reported burden due to features of their working environment outside of their control such as others also visiting or working in the client's home, a pressure to work when not fully well, access to adequate childcare and fears for themselves, their family and their clients related to COVID-19.
- Whilst interviews also revealed positive responses to pandemic working by organisations and their teams, they provide insights into how such practices could be further embedded and further improved.



Further information:

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

Protocol paper: <https://doi.org/10.23389/ijpds.v5i4.1656>

OSF website: <https://osf.io/u3zfi/>

OSCAR study team affiliations:

Cardiff University: Mike Robling (CI); Rebecca Cannings-John (CI); Lucy Brookes-Howell; Kerenza Hood; 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. We would like to acknowledge all the data providers who make anonymised data available for research including Social Care Wales who provided the DCW workforce data.

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
Senior 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

Recommendations

The OSCAR study team is based in the Centre for Trials Research, Cardiff University. Our interviews with Domiciliary Care Workers (DCWs) about their experiences of providing care during the COVID-19 pandemic identified several challenges. We summarise these findings, which contribute to the risk of exposure to COVID-19, or to other adverse outcomes such as emotional or wellbeing burden. Our recommendations identify different points at which intervention may be helpful, for example at policy or organisational level.

The need for tailored training is also identified to further address some challenges for example, on how to manage client and family expectation.

Summary of challenges	Level of Response					Recommendations	Tailored Training
	Policy	Community	Organisational ¹	Interpersonal ¹	Personal		
Lack of domiciliary care workers: Staff shortages due to shielding and sickness as well as ongoing staff shortages.						Funding to support sector to address sickness, recruitment/retention and increase in demand of services.	
Providing personal client care: Core work involves personal/proximal care to client in their own home. ²						Maintain funding and adequate stocks of PPE, Lateral Flow Tests. Evidence based changes on requirement for PPE to be communicated by policy clearly and rapidly to employees and DCWs.	
Lack of PPE: Initial lack of Personal Protective Equipment (PPE) experienced by some DCWs. Infection risk without PPE.							
Unknown COVID-19 status: COVID-19 status of both DCWs and clients unknown causing uncertainties relating to infection risk.							
Patient discharge from hospital: Discharge of hospital patients of unknown COVID-19 status.						Effective discharge screening and planning.	
Lack of formal risk assessments: Lack of formal risk assessments by employers resulting in some DCWs assessing each other for COVID-19 risk. Possible inadequate assessment and mitigation.						Develop and implement COVID-19 risk assessment for DCWs that accounts for inherent risks of role.	

Risk of exposure to COVID-19 Risk to emotional or wellbeing burden

¹Interpersonal definition: DCW interactions with those around them, in this context including clients, colleagues, families and friends.

²Although providing personal client care is a core feature of the DCW role, here we focus on additional mitigation strategies.

Summary of challenges	Level of Response					Recommendations	Tailored Training
	Policy	Community	Organisational	Interpersonal	Personal		
Clients/families not following safety guidance: Clients and families not adhering to COVID-19 safety guidance (e.g. wearing masks and household mixing, risking infection).						<p>Pro-active and clear signposting of trusted information and guidance to DCWs and their clients on safety, efficacy and management of COVID-19 prevention measures. DCWs, clients and families to access information.</p> <p>Pro-active conversations with DCWs in regions with higher hesitancy by public health officials.</p>	
Efficacy of lateral flow tests queried: DCWs querying efficacy of LFTs, possibly leading to non- / inconsistent use.							
Perceptions of lower risk post vaccination: DCWs felt less at risk / lack awareness of catching and transferring COVID-19 post vaccination.							
Vaccination hesitancy: Lack of information about the vaccination including safety concerns, leading to reduced vaccination uptake.							
UK wide COVID-19 guidance confusing: Real and apparent differences between Wales and England (or UK) policies shared on mainstream media. This could lead to using incorrect policies or 'policy overload'.							
PPE not practical with clients: Clients' fear/dislike of PPE (e.g. unable to hear DCW due to reduced hearing) potentially leading to improper mask use.							
COVID-19 training not tailored to role: COVID-19 training not focused on DCW practical tasks resulting in difficulties, uncertainties and improper use (e.g. glasses steaming up when bathing clients when using standard masks).							
Reassignment of carer roles: DCW reassigned to several supported living houses following closure of respite houses opening up risk of COVID-19 infection to DCWs and clients.							
Sickness payments and contracts: Pressure to attend work despite illness/ COVID-19 status and stress due to no sickness payment.						<p>Review current procedures and engage with DCWs on their views (choice of PPE, role descriptions, contracts and sickness payments).</p> <p>Risk assess those DCWs whose role changes for increased risk of COVID-19 infection.</p> <p>Continued investment, including of the COVID-19 statutory sick pay enhancement scheme in Wales.</p>	
Isolation and loneliness: Working patterns driven by pandemic restrictions causing loneliness and isolation.						<p>Enhanced teamwork, good news sharing and improved communication between DCW teams - Employer and staff engagement via social media and communication platforms.</p> <p>Increased signposting to support. Acknowledgement of challenges by employers, national media, political leaders.</p>	
Fear of COVID-19: For self, families and clients causing anxiety.							
Feeling under-valued: Lack of recognition of value in job role.							
Increased workload for staff in an advanced role: DCWs in mainly office-based role (Team Leader) now with/greater client contact increasing workload & stress.							
Lack of support from employers: Some employers perceived as unfamiliar with practical working conditions, sceptical of worker symptoms - leading to low worker morale.							

Risk of exposure to COVID-19

Risk to emotional or wellbeing burden