



UK Health Security Agency

Weekly Care Homes Evidence Digest

Prevention and control of COVID-19 in home care/care homes settings

24th December 2021

Summary

This weekly digest contains a selection of evidence published in the last 7 days, in relation to the prevention and control of COVID-19 in home care/care home settings. We search a number of Covid-19 review repositories, an existing UK Health Security Agency (UKHSA) Covid-19 evidence digest (including Covid-19 evidence digests produced by Public Health England prior to October 2021), Ovid Medline and Embase, Social Care Online, medRxiv (pre-print server) and various websites. We select peer reviewed and non-peer reviewed publications (pre-prints), as well as systematic reviews, guidance and evidence summaries.

The digest is produced by UKHSA [Knowledge and Library Services \(KLS\)](#), in conjunction with a small editorial team.

We do not accept responsibility for the availability, reliability or content of the items included in this resource and do not necessarily endorse the views expressed within them. Our intent is to highlight early emerging research findings as well as research that has been subject to peer review and wider scrutiny.

Peer-Reviewed Articles

Publication date	Title / URL	Journal / Article type	Digest
16.12.2021	Using telemedicine in nursing homes during the COVID-19 pandemic: A multi-perspective view on the implementation process	Nursing Open / Study	<ul style="list-style-type: none"> • Authors used a qualitative design based on interviews to explore diverse perspectives on the implementation of a tablet- and videoconferencing-based telemedicine application from the perspectives of management, nursing staff and physicians. • Nursing home management implemented telemedicine rapidly, using a top-down approach met with ambivalence by staff. On the part of nurses, their professional understanding of person-centred care was challenged. • Telemedicine also impacted cooperation between nurses and physicians, influencing their respective understanding of their roles. • Working experience with digital nursing documentation had a positive effect on users' acceptance of the telemedicine solution.
17.12.2021	Impact of vaccination on the spread of SARS-CoV-2 infection in north-east Italy nursing homes. A propensity score and risk analysis	Age & Aging / Study	<ul style="list-style-type: none"> • This study estimated the impact of SARS-CoV-2 infection among nursing home (NH) residents, focusing on the risk of hospitalisation and death due to COVID-19 compared with the general older population. It also provided evidence of risk changes over time. • Older people, resident in Veneto, were enrolled from the regional registry of the population. Patients were assigned to NH or non-NH residents groups. The follow-up period was defined as 21 February 2020 – 3 May 2021 and then divided into three waves. • NH residents shared common spaces with other patients and healthcare professionals and were more exposed to infections. • Nonetheless, in Italy from late December 2020 to May 2021, 95% of NH residents and their healthcare professionals received at least one vaccine dose and RRs for all outcomes decreased in NH.
17.12.2021	“You Feel Very Isolated”: Effects of COVID-19 Pandemic on Caregiver Social Connections	Gerontology and Geriatric Medicine / Study	<ul style="list-style-type: none"> • One in five individuals in the United States provides care and support to ill, disabled, and aging family members in the home, leading to feelings of burden, stress, and poor health and well-being.

			<ul style="list-style-type: none"> • This sequential mixed-methods study aimed to examine the effect of the COVID-19 pandemic on family caregivers’ social connections. Eighty-two caregivers completed a web-based survey which comprised of fixed-choice and open-ended questions. • Three themes echoed the quantitative findings and centered around defining boundaries, intentionality in social interactions, and loss of social resources. • Although caregivers were often strained by new or increased caregiving demands, many experienced positive changes such as feeling a deeper connection with the care-recipient. • Findings from this study highlight the need for further consideration of the impact of social isolation on the well-being of caregivers.
<p>18.12.2021</p>	<p>Kinetics of SARS-CoV-2-Neutralising Antibodies of Residents of Long-Term Care Facilities</p>	<p>Journal of Nutrition, Health & Aging / Study</p>	<ul style="list-style-type: none"> • The objective of this study was to examine the kinetics of neutralizing antibodies (NAbs) directed against the SARS-CoV-2 virus in residents of the nursing homes (NHs) and long-term care units (LTCUs) of our University Hospital who were identified with positive serology after the first epidemic outbreak. • The median NAb titer in June 2020 was 80 versus 40 three months later, showing a statistically significant decline, but remained stable between the three- and six-month timepoints. • By nine months after vaccination, we observed a significant difference between vaccinated residents known to have positive serology before vaccination (SERO+, Vacc+) and those vaccinated without having previously shown COVID-19 seroconversion (SERO-, Vacc+), the latter group showing similar titers to the SERO+, Vacc- participants. • The median antibody titer in SERO+, Vacc+ patients increased 15-fold following vaccination. • Humoral immunity against SARS-CoV-2 appears to be persistent in elderly institutionalized patients, with a good post-vaccination response by residents who had already shown seroconversion but a notably diminished response by those who were seronegative before vaccination. • To evaluate immunity in its entirety and elaborate a sound vaccination strategy, the cellular immune response via T cells specific to SARS-

			CoV-2 merits analysis, as this response is susceptible to being affected by immunosenescence.
19.12.2021	A Phenomenological Content Analysis of Elder Abuse during COVID-19 Pandemic in India	Gerontology and Geriatric Medicine / Study	<ul style="list-style-type: none"> Elder abuse due to COVID-19 pandemic is a matter of grave concern in Indian society: older people are facing social rejection, mental torture and abusive behaviour by family members, relatives, neighbours and caregivers. This study aimed to examine the nature of elder abuse due to COVID-19 pandemic under the theoretical framework of anomie theory and to explore its outcome on the well-being of older people The study uses phenomenological content analysis method. The information has been gathered from many Indian newspapers, magazines and news portals. Researchers examined the content of news stories about elder abuse that were published between 1 April 2021 and 15 May, 2021 and analysed the results. Their findings show older people have been abused due to fear of COVID-19 infection, poor financial condition and irresponsibility of caregivers. Most often, elders suffer abuse at the hands of their loved ones, neighbours and caregivers.
20.12.2021	COVID-19 Pandemic and Consecutive Changes in Geriatric Rehabilitation Structures and Processes - A Deeper Attempt to Explain the COVID Rehabilitation Paradox (Lessons to Learn to Ensure High Quality of Care in GR Services)	Journal of Nutrition, Health & Aging / Study	<ul style="list-style-type: none"> Older people have been particularly adversely affected by the COVID-19 pandemic. By comparison with younger people, they have experience higher rates of hospitalisation and intensive care unit admissions, have had worse clinical outcomes, and have required longer to recover. Geriatric rehabilitation (GR) has a particular role to play in the assessment and management of older people with multiple long-term conditions, frailty, disability and/or cognitive impairment. To describe this situation in detail, we incorporated questions on COVID-19 into the “European Geriatric Medicine Society survey on best practice in geriatric rehabilitation”. This survey was created to provide the basis for a European best practice guideline for geriatric rehabilitation. This study reports important changes in the structure and processes of GR across multiple European countries. It provides a sense that GR was not prioritised, or even protected, as part of the COVID-19

			<p>response. It is likely that services were rendered less effective, and that patients experienced worse outcomes, as a consequence. More detail will be forthcoming with the outcomes of important pending cohort studies about GR across Europe.</p> <ul style="list-style-type: none"> To prevent similar deficiencies during future crises — including pandemics, epidemics, and natural and man-made disasters —GR services need to be considered more fully as part of contingency planning.
21.12.2021	Behavioral Interventions in Long-Term Care Facilities during the COVID-19 Pandemic: A Case Study	Geriatrics / Case Study	<ul style="list-style-type: none"> During the COVID-19 pandemic, long-term care (LTC) centers have adopted a series of measures that have affected the physical and cognitive health of patients. Routines of the patients, as well as the interventions of professionals, have been altered. In the case presented here, our aim was to explain the effect that the strong confinement due to the spread of the first COVID-19 wave in Spain had on a 75-year-old resident in an LTC center, with cognitive and behavioral symptomatology compatible with a diagnosis of mixed dementia, as well as the measures that the center adopted to manage the lockdown situation in the best possible way, including personalized attention protocols and a video call program. Different nosological hypotheses are also raised using a semiological analysis, including the analysis of the initial and continuation diagnostic protocols, as well as the therapeutic options.

Preprints

Publication Date	Title / URL	Preprint Source	Digest
18.12.2021	Antibody Responses to 3rd Dose mRNA Vaccines in Nursing Home and Assisted Living Residents	MedRxiv	<ul style="list-style-type: none"> A comparison of SARS-CoV-2 wild-type and the beta variant virus neutralization capacity between 2 and 3 mRNA vaccine series in nursing home residents, and between nursing home and assisted living residents strongly supports 3rd dose vaccine recommendations, and equivalent policies for nursing homes and assisted living settings.

			<ul style="list-style-type: none"> Findings suggest that residents mount a robust humoral response to a 3rd mRNA vaccination, and have greater neutralization capacity compared to a 2 dose series
21.12.2021	The role of airborne transmission in a large single source outbreak of SARS-CoV-2 in a Belgian nursing home in 2020	MedRxiv	<ul style="list-style-type: none"> Paper aims to better understand the conditions which have led to one of the largest COVID-19 outbreaks in Belgian nursing homes in 2020, using case of a nursing home in Flanders, Belgium, which experienced a massive outbreak of COVID-19 after a cultural event. An external volunteer who dressed as a legendary figure visited consecutively the 4 living units and tested positive for SARS-CoV-2 the next day. Within days, residents started to display symptoms and the outbreak spread rapidly within the nursing home. Authors interviewed key informants and collected standardized data from all residents retrospectively. 115 positive samples with a Ct value of <37 by qRT-PCR were analysed using whole-genome sequencing. Six months after the outbreak, ventilation assessment of gathering rooms in the nursing home was done using a tracer gas test with calibrated CO2 sensors. The timeline of diagnoses and symptom onsets clearly pointed to the cultural event as the start of the outbreak, with the volunteer as index case. Genotyping of positive samples depicted the presence of one large cluster, suggesting a single source outbreak. The global attack rate among residents was 77% with a significant association between infection and presence at the event. Known risk factors such as short distance to or physical contact with the volunteer, and wearing of a mask during the event were not associated with early infection. This investigation shows a rapid and widespread single source outbreak of SARS-CoV-2 in a nursing home, in which airborne transmission was the most plausible explanation for the massive intra-facility spread. The results underscore the importance of ventilation and air quality for the prevention of future outbreaks in closed facilities.

Guidance

Publication date	Title / URL	Author(s)	Digest
15.12.2021	COVID-19: Preventing nosocomial infection in older people	O'Mahony; Sinead	<ul style="list-style-type: none"> This resource provides practical steps that can be taken to protect older patients against nosocomial (hospital-acquired) COVID-19 on acute wards this winter.
Updated 22.12.2021	COVID-19: management of staff and exposed patients and residents in health and social care settings	UKHSA	<ul style="list-style-type: none"> Guidance on the management of staff, patients and residents who have been exposed to COVID-19.

Statistics

Publication date	Title / URL	Author(s)	Digest
21.12.2021	Notifications to Care Inspectorate Wales related to COVID-19 in adult care homes: 1 March 2020 to 15 December 2021	Welsh Government	<ul style="list-style-type: none"> The report provides provisional counts of the number of adult care homes reporting one or more confirmed cases of COVID-19 and provisional counts of deaths in care homes. This is based on notifications by care home providers to Care Inspectorate Wales. The location of death may be in the care home, in hospital or another location.
21.12.2021	Care home resident deaths registered in England and Wales, provisional	ONS	<ul style="list-style-type: none"> Provisional counts of the number of care home resident deaths registered in England and Wales, by region, including deaths involving coronavirus (COVID-19), in the latest weeks for which data are available.
21.12.2021	Number of deaths in care homes notified to the Care Quality Commission, England	ONS / CQC	<ul style="list-style-type: none"> Provisional counts of deaths in care homes caused by the coronavirus (COVID-19) by local authority. Published by the Office for National Statistics and Care Quality Commission.
22.12.2021	Coronavirus (COVID-19): adult care homes - additional data	Scottish Government	<ul style="list-style-type: none"> Weekly data on COVID-19 in adult care homes in Scotland.

Editorials and News

Publication date	Title / URL	Author(s)	Digest
21.12.2021	Statement – Update on COVID-19: Omicron is gaining ground: Protect, prevent, prepare	Kluge, Hans Henri P.	<ul style="list-style-type: none"> • Since its identification, 27 days ago, the Omicron variant of concern has been detected in at least 38 of the 53 Member States of the WHO European Region. • Within weeks, Omicron will dominate in more countries of the Region, pushing already stretched health systems further to the brink. Omicron is likely to become the dominant variant circulating in our Region. • There are 3 things that we need to do urgently: protect ourselves through vaccination, prevent further infections, and prepare health systems for a surge in cases. <ul style="list-style-type: none"> ○ It is vital that we scale-up vaccine uptake, be it a first, second or an additional/booster dose, starting with people at risk of severe COVID-19 and health care workers. We must protect the vulnerable. And we must also protect our health workforce to safeguard health systems. ○ Vaccination goes hand-in-hand with other measures we can all take to prevent infection. We all know this means: avoiding crowded, closed, and confined spaces; keeping a physical distance from others; frequently washing hands; wearing a mask; coughing or sneezing into a bent elbow or tissue; and properly ventilating indoor spaces. ○ Health authorities must strengthen capacity: increasing testing and trace capacities; engaging primary health care in case management; preparing hospitals for a surge; and supporting health and frontline workers. • Two years in, health workers are being severely tested once again. It is deeply worrying that one in 5 is suffering from anxiety and depression from the pandemic. Their concerns must be addressed and their need for manageable working conditions supported.