INTERNATIONAL LONG TERM CARE POLICY NETWORK

Care Homes and COVID-19: Results of an Online Survey in Germany

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1. Key points

- About half of all COVID-19 deaths in Germany are of care home residents. This is similar to findings from other Western countries. Like in those countries, care homes are the most important hotspot for COVID-19 deaths. It is likely that the absolute number of deceased care home residents in Germany is lower than in other countries because COVID-19-related mortality is generally lower than in many other countries, not so much because there is better protection in care homes than elsewhere.
- 80 percent of all care homes do not have even one SARS-CoV-2 case among their residents. Of those that have cases, one third have eleven cases or more. Once the virus enters the facility, it seems to be difficult to prevent further spreading.
- At the beginning of the pandemic, care homes suffered from severe shortages of personal protective equipment and surface disinfectants. Since then, the situation has improved considerably but some shortages still persist.
- In order to protect their residents, care homes restricted all physical contact to persons outside the care home. Consequently, this restriction in itself has endangered the mental health of residents. These measures should be replaced by provisions that allow contact without significantly increasing the risk of infection.
- When the survey was conducted, residents and employees were only tested if they showed symptoms. As the results only return a few days later, most of the infections had happened by then. In order to restrict the spreading of the virus, it is therefore important to introduce regular serial testing of all care home employees, all visitors and those residents that move in or return from hospital.

2. Introduction

Germany has succeeded in keeping the numbers of infections and deaths with COVID-19 lower than in many other western countries. As in these countries, however, some groups are particularly affected. People in need of long-term care are particularly at risk of severe forms of disease and high mortality when infected with SARS-CoV-2. At the same time, care workers are at greater risk of infection. The degree to which care homes are affected and the conditions under which long-term care is currently provided in care homes are unknown yet.

In order to generate such information, a research team at the University of Bremen led by Karin Wolf-Ostermann and Heinz Rothgang carried out a national online survey from 28th April to 12th May 2020. More than 7,000 care homes were invited by e-mail to provide information on structural features, the prevalence of the SARS-CoV-2 virus in their institution, the effects of the pandemic, e.g. on staffing and resources and changes in work processes and communication structures. The research team also asked long-term care associations to encourage care homes to take part in the survey. Altogether 824 care homes with 64,772 residents participated. With respect to the number of residents in German care homes the sample represents about 8 per

cent of all care home residents. In terms of key structural features, the distribution of the participating facilities broadly corresponds to that of all German facilities (Wolf-Ostermann, Rothgang et al. 2020). Results therefore can be considered representative for the whole country.

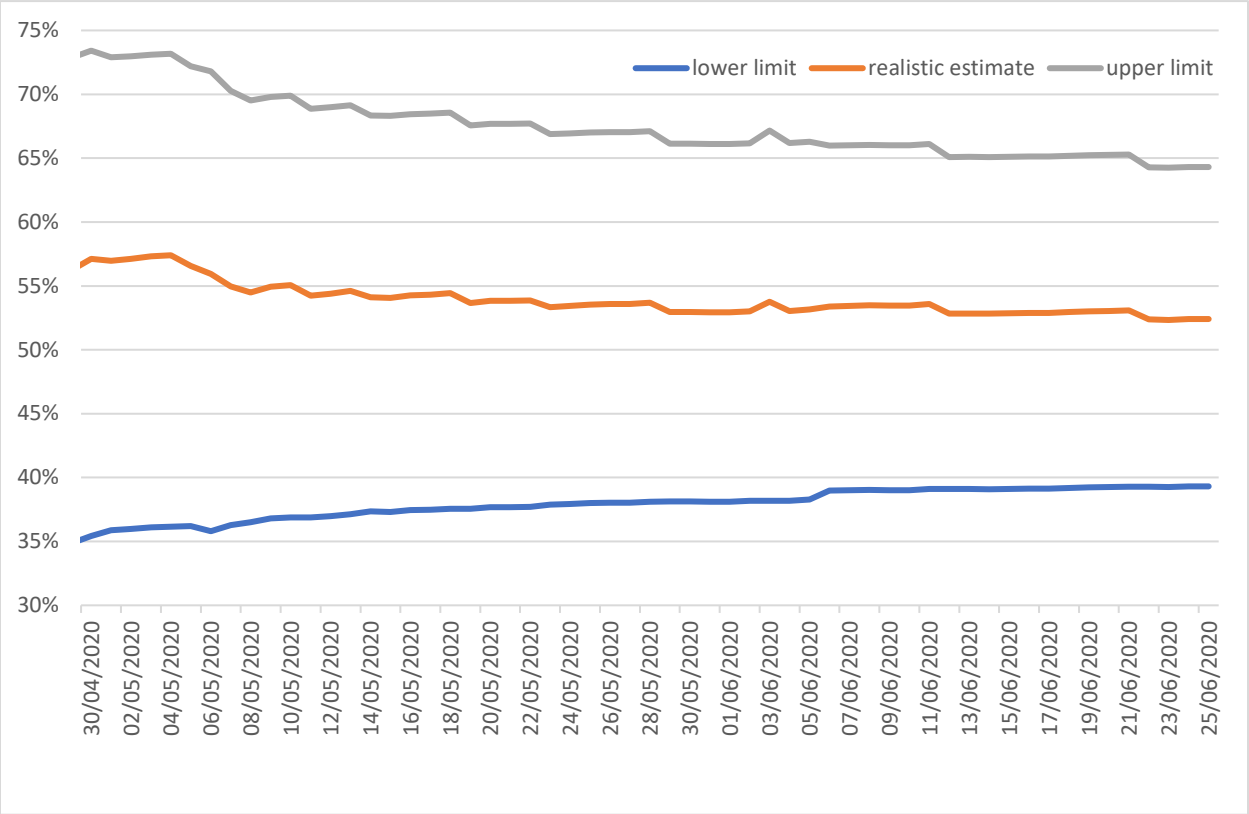
3. Survey of COVID-19 in care homes

3.1. Spread of infections

According to our figures, on 5th May 2020, when half of the evaluated questionnaires had been received, the share of all COVID-19 deaths who were care residents stood at 49%. This share is higher than the value calculated on the basis of data from the Robert-Koch Institute (RKI) if the number of deaths with COVID-19 in collective living quarters (in fact: almost always care homes) – as defined under § 36 of the German Law on the Prevention and Control of Infectious Diseases – is put in relation to the total number of fatalities with COVID-19. For 5th May this ratio stood at 36% (RKI 2020a). However, according to the RKI, in 35% of the fatalities reported, it is unknown whether the deceased lived in collective living quarters. The RKI therefore expressly terms its values as lower threshold values. If the share of those for whom it is unknown whether they live in a care home is added to this number we yield an upper threshold, and we get a more realistic estimate (if we assume that the share of care home residents among the decedents whose status is unknown is the same as for those for whom it is known). In its daily report, the RKI has been publishing the lower limits as well as the share of unknowns from 30th April onwards.

Figure 1 shows the lower and upper threshold as well as the resulting 'realistic estimate' from 30th April to 25th June. While the share of unknown is decreasing over time, the upper and lower limit converge towards the realistic estimate which stays above 50% for the whole observation period. For 5th May, it is also above our survey result. The survey results therefore do not exaggerate the relevance of care homes as the major hotspot for deaths with COVID-19.

Figure 1. Share of the deceased with COVID-19 who lived in care homes according to RKI figures from the daily reports



Source: own calculations based on Robert Koch Institute data

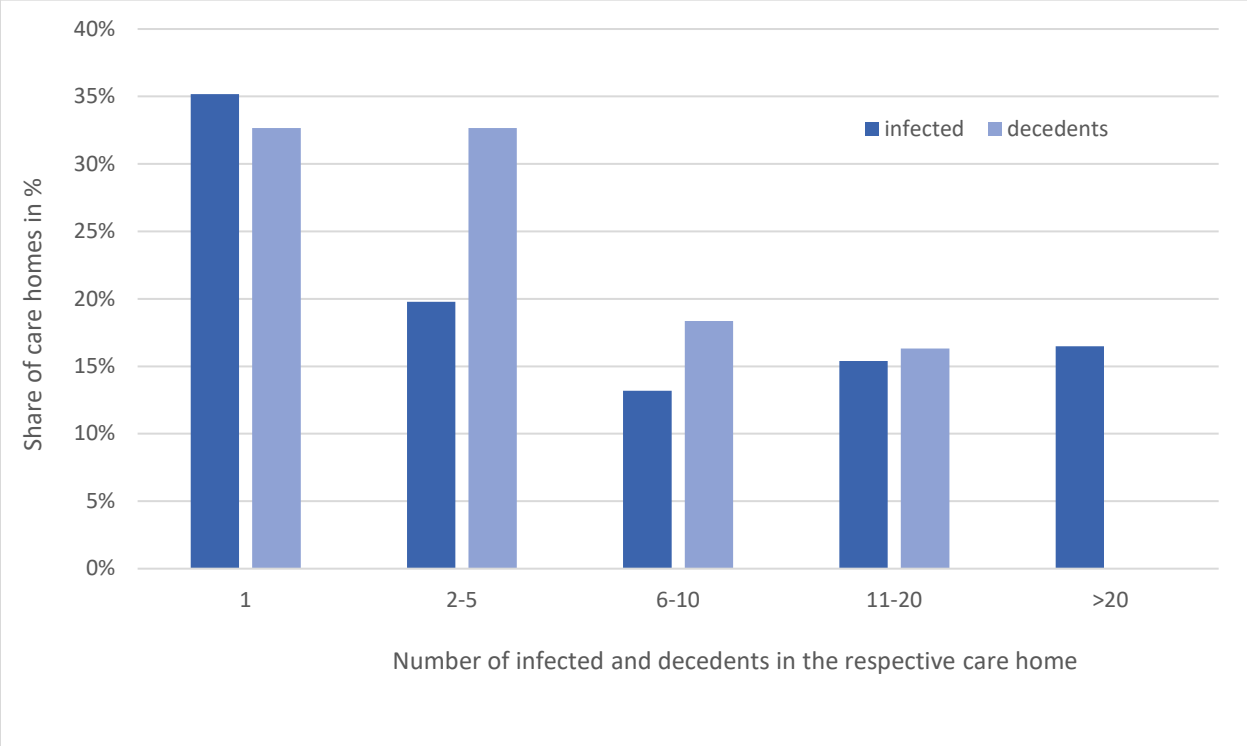
According to the survey data as per 5th May, care home residents make up only 7 % of all infected people in Germany but half of all the deceased. The likelihood of dying from the disease is thus seven times higher in infected care home residents than in the overall population.

Based on data from 26 countries, Comas-Herrera et al. (2020) conclude that the share of all COVID-19 deaths that were care home residents is 47% on average. The German figures do not differ significantly from this. In Germany, the share of care home residents dying with COVID-19, however, is at about 0.4% and considerably lower than in many other countries. The comparatively low death toll in German care homes seems to be a result of lower casualties in the country as a whole and not so much due to better conditions in German care homes.

The situation among care homes varies considerably. According to our survey just under 80% of care homes have no confirmed SARS-CoV-2 cases among their residents. This means that only very few facilities are directly, but then often severely, affected. Over a third of the facilities with at least one case of infection report exactly one laboratory tested COVID-19 case, one third reports 2-10 cases, and the final third reports more than ten and a maximum of 48 cases (Figure 2). Of the infected residents, however, 81% live in facilities with more than ten COVID-19 infections. It is a similar picture in relation to fatalities. Around one third of facilities have

one, 2-5, and more than five fatalities respectively (Figure 2), whereby 75% of deaths occurred in homes with more than five fatalities.

Figure 2. Care homes with infections/deaths with COVID-19 infected by number (n=91 infections, n=47 homes)



Source: own survey

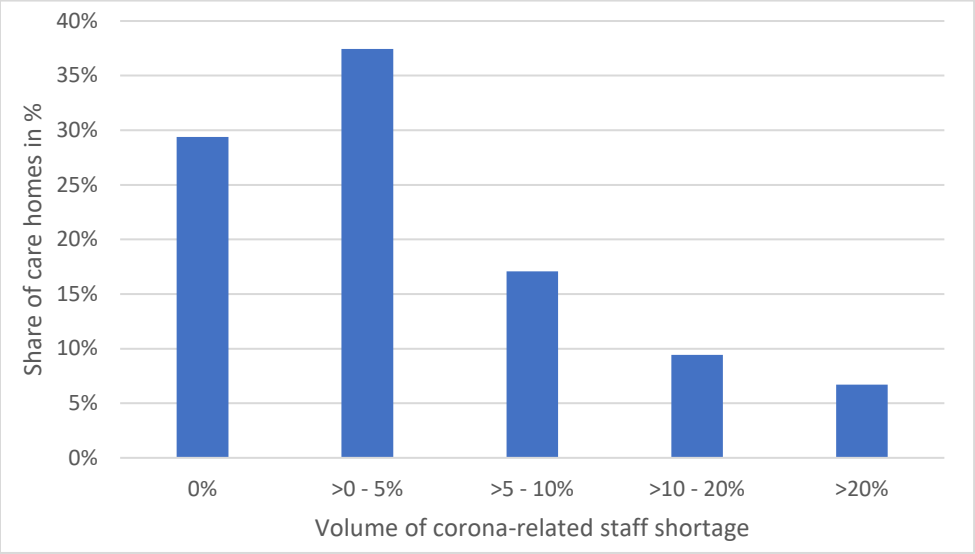
It is important to note that the size of homes has an impact on the figures. If the facilities are divided into three groups according to size, one can see that the smaller facilities have twice as many infected residents as large facilities, and this effect is even more marked in the case of fatalities with COVID-19. This suggests that smaller facilities have greater difficulties coping with the new challenges posed by the pandemic and are in greater need of help from the outside.

Care home employees are also among those particularly affected by the pandemic. One in ten facilities has at least one infected employee. As of 5th May, 1.2 % of care home workers are infected, which is about six times higher than in the total population. In half of the facilities, there are no laboratory confirmed SARS-CoV-2 cases among residents, meaning that they have so far succeeded in preventing the infection spreading from workers to residents.

3.2. Staffing and Equipment

More than 70% of care homes reported staff shortages due to the pandemic, though most facilities were less severely affected with a corona-related shortage of around 5%. Only one in six homes reported a corona-related staff shortage of more than 10% (Figure 3).

Figure 3. Care homes according to volume of reported staff shortage (N=732 facilities)

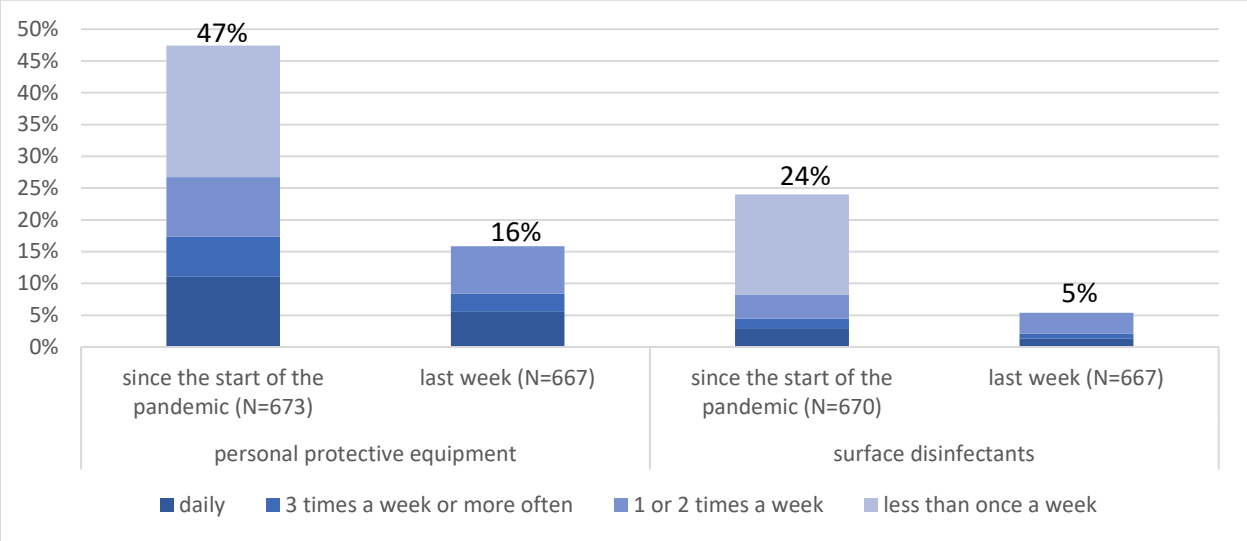


Source: own survey

In order to cope with these shortages, facilities are falling back on internal staff management measures such as redeployment (33% of respondents), increased hours (28%), bonus payments (9%) and leave bans (5%). In addition, homes fall back on temporary and agency workers (16%), former employees (though seldom at 5%) and care pools (4%).

During the initial phase of the pandemic there were immense shortages of personal protective equipment (PPE) for staff and surface disinfectants. Almost half of all facilities reported problems obtaining PPE for staff during the pandemic (cf. Figure 4).

Figure 4. Care homes with reported shortages of PPE and surface disinfectants



Source: own survey

In the meantime, many shortages have been remedied, although one in six care homes report that they still do not have sufficient PPE. In light of the large number of infected workers and people in need of care this figure is alarming. It must be ensured in the future that every care home has sufficient protective equipment and that this is refinanced.

3.3. Strategies and Measures in Care Homes

Every long-term care facility has taken measures to reduce the spread of the infection, the vast majority following the guidelines of the Robert-Koch Institute (RKI 2020b). Almost all facilities (98.7%) have taken steps to reduce contact within the facilities, set up crisis management teams (96.1 %) and implemented absence procedures for staff with symptoms (97.0%). At the time of the survey, half of all facilities (49.1 %) had a ban on admissions, and almost a third of facilities (30.7%) with confirmed SARS-CoV-2 cases among their residents shut down parts of their premises. These measures meant a reduction in available full-time inpatient care at a time when other service providers (ambulatory and day care) also had to reduce their services due to COVID-19. Insufficient provision of long-term care in some cases are therefore likely.

In order to carry out isolation measures, one sixth (17.8%) of homes undertook structural modifications to the buildings, a further 8.3% planned to take such measures. More than a quarter of the homes stated that such measures were not possible, however, while almost half (47.9%) did not deem such measures to be necessary.

Strict measures regarding contact with the outside world were also implemented. Nine out of ten facilities (87.1%) refused or severely restricted admittance to voluntary workers, and more than half (56.4%) prohibited access to visitors, while the remainder only allowed visitors in exceptional cases, independent of whether the home in question had SARS-CoV-2 cases or not. None of the care homes allowed unrestricted access. Restricted access was also imposed for external service providers, including medical treatment and therapies. A good quarter (27.7%) allowed no admittance at all, and two thirds (66.6%) allowed admittance in exceptional cases only.

This is one of the key dilemmas of the current situation – physical distancing is at present the only effective strategy worldwide for containing the pandemic. Because of their multi-morbidity and often accompanying immobility, people in need of care are more susceptible to infections (Lai et al. 2020), but distancing measures cannot directly be applied to them because they are reliant on close physical contact. However, the contact restrictions that were imposed led to extremely harmful isolation of people who require care and increased mortality (Gardner et al. 2020; Seidler et al. 2020). For relatives, strict visiting bans are hardly bearable (Koppelin 2020). The extent to which external contacts are restricted made apparent through the study are not tenable in the long run. Care facilities must draw up hygiene procedures to allow visitors, voluntary workers and external service providers and health professionals back into the homes without increasing the risk of infection.

4. Conclusions

In order to curb the deadly effects of the pandemic in long-term care homes, the spread of the virus must be contained in homes already affected, and its incursion into homes not yet affected must be prevented. A key element to this is testing. Almost all the facilities (92.5 %) with at least one case of suspected infection among their residents reported that the respective person had been tested. The results of the tests are available on average (arithmetic mean) after three days, though the maximum waiting time was as long as 14 days. The test results for staff members, by contrast, arrive on average after 3.4 days, with a maximum waiting time of 25 days. As infected persons are infectious two days before the first symptoms occur (He et al. 2020), precious time is lost and the results are only available once infectiousness has died down. The processes must therefore be accelerated, and this should be possible, as testified by the results for severely affected facilities, which were apparently given higher priority and whose results were available after an average of 2.4 days.

Less than half of the care home residents (47.3 %) and less than two thirds of home employees who tested positive for SARS-CoV-2 actually showed typical symptoms. The significance of asymptomatic courses (and pre-symptomatic courses) in care homes is obvious. These infections cannot be identified if tests are only carried out when there is a suspected infection. If long-term care homes, currently the hotspots for fatal infections, are to be better protected, it is imperative that serial testing (e.g. pooled testing) is carried out regularly and the results are reported back faster. Tests should also be made on a standard basis for newcomers and returnees from hospital.

Long-term care facilities also face considerable difficulties in relation to the staffing situation. Through the loss of care task offered by family members and volunteers, as well as the additional hygienic procedures and preventive measures, care facilities calculate that workloads have increased on average by a good hour per shift. At the same time there are staff shortages due to the coronavirus, and the staffing situation has long been characterised by many as inadequate (Rothgang et al. 2020) and the workplace situation as extremely stressful (Schmucker 2019). There is reason to fear that care homes are being left to run down. As this is not a sustainable option, the staffing situation especially needs to be improved. It is not without reason that, in response to the open question about what they need, besides the guaranteed availability of protective equipment and disinfectants, national standard, practicable action guidelines and regular tests for residents and staff, above all, care home managers demand better pay for care workers and better staffing. These demands should not be ignored when the joint self-administration meets shortly to present their proposals on the introduction of a personnel planning procedure in accordance with the Para. 113c, Book XI of the German Social Code Book.

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