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Original Study

Allowing Visitors Back in the Nursing Home During the COVID-19 Crisis: A Dutch National Study Into First Experiences and Impact on Well-Being

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A B S T R A C T

Objectives: To prevent and control COVID-19 infections, nursing homes across the world have taken very restrictive measures, including a ban for visitors. These restrictive measures have an enormous impact on residents' well-being and pose dilemmas for staff, although primary data are lacking. A Dutch guideline was developed to cautiously open nursing homes for visitors during the COVID-19 pandemic. This study reports the first findings on how the guideline was applied in the local context; the compliance to local protocols; and the impact on well-being of residents, their family caregivers, and staff.
Design: A mixed-methods cross-sectional study was conducted.
Setting and Participants: In total, 26 nursing homes were permitted to enlarge their possibilities for allowing visitors in their facility. These nursing homes were proportionally representative of the Netherlands as they were selected by their local Area Health Authority for participation. At each nursing home, a contact person was selected for participation in the current study.
Methods: A mixed-methods cross-sectional study was conducted, consisting of questionnaire, telephone interviews, analyses of documentation (ie, local visiting protocols), and a WhatsApp group.
Results: Variation in local protocols was observed, for example, related to the use of personal protective equipment, location, and supervision of visits. In general, experiences were very positive. All nursing homes recognized the added value of real and personal contact between residents and their loved ones and indicated a positive impact on well-being. Compliance with local guidelines was sufficient to good. No new COVID-19 infections were reported during this time.
Conclusions and Implications: These results indicate the value of family visitation in nursing homes and positive impact of visits. Based on these results, the Dutch government has decided to allow all nursing homes in the Netherlands to cautiously open their homes using the guidelines. More research is needed on impact and long-term compliance.

Nursing homes and other long-term care facilities provide care for the most vulnerable people within our society, the majority of them older people with chronic diseases such as dementia. This group has been highly affected by COVID-19. First estimations indicate that in Europe, between 19% and 72% off all people who died from COVID-19 lived in nursing homes.[1] In the Netherlands, the most recently updated estimations from the electronic patient files indicate that 9785 residents had (suspected) COVID-19. Of those, 1871 have died and 2393 have recovered.[2] To prevent and control COVID-19 infections, nursing homes across the world have taken very restrictive measures, including a ban on visitors.[3] In many European countries including Germany, the Netherlands, Belgium, and France, nursing homes closed their doors for visitors since mid-March as obliged by

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law. In practice this meant that no family, informal caregivers, or friends could visit residents and that residents were not allowed to go outside. Often these restrictive rules also applied to health professionals such as physicians, psychologists, and physiotherapists.[4] Furthermore, all group-based and social activities had been canceled. Throughout the pandemic, guidelines recommended that residents remain in their own rooms for as much as possible.[5]

These restrictive measures have an enormous impact on residents and their well-being and pose dilemmas and challenges for staff, although primary data are lacking.[6] The ban on visitors and restricting their movement is a serious challenge to their autonomy and right to make their own choices,[4,6] in an era where so much progress was made in eliminating restraints. Despite technological innovations like video calls and creative solutions being tried (eg, window visits, or separate containers using plexiglass outside the building), residents are socially isolated. Especially, people with dementia might benefit more from physical closeness (including holding hands, hugging) than from a talk at a distance with relatives. Some residents have to be isolated within their own room because of COVID-19 infections on the unit. Prior research has indicated that loneliness and social isolation have negative consequences for residents' health and well-being.[7,8]

After 2 months of social isolation and lockdown of nursing homes, some European countries have recently taken measures to cautiously open nursing homes for visitors, although with strict guidelines. So far, no studies have been reported on primary data that have investigated how these general guidelines have been implemented in the local context of nursing homes; how compliant residents, visitors, and staff are; and what their experiences are. In the Netherlands, 8 weeks after the lock down of nursing homes for visitors, the Ministry of Health, Welfare and Sports set up a national pilot to lift the ban in nursing homes. In a sample of nursing homes, 1 visitor per resident was allowed, using a national guideline (see Box 1).[9] This guideline was developed by stakeholders within long-term care, including the sector organization for nursing homes, professional organizations for elderly care physicians, psychologists and nurses, the Alzheimer's Society, and client representative organizations. It has similar elements compared with other countries such as Germany, France, and Belgium. The guideline is directive but not mandatory. There is, for example, no penalty for nursing homes if they do not comply. For infection prevention and control, it is crucial to gain insight into how this Dutch national guideline has been implemented in local practice. Furthermore, more knowledge is needed on how well visitors and staff comply to the rules and regulations for preventing COVID-19, such as keeping sufficient distance and taking appropriate hygiene measures.

This study reports the first findings on how the national guideline was applied in the local context of the nursing homes, the compliance to local protocols, and the impact on well-being of residents, their family caregivers, and staff. It used the framework for process evaluation,[10] focusing on both first-order process data (related to the reach of the guideline and extent of performance in practice) and second-order process evaluation data (strategies used for implementation and encountered barriers and facilitators).

Box 1. Elements From the Dutch Guidelines for Visitation in Nursing Homes During COVID-19

Preconditions for visitors
- Make agreements with the nursing home on frequency and duration of the visit
- One designated visitor is allowed per resident
- Take personal hygiene measures (use of hand sanitizer at entrance, temperature check)
- Visitors are spread throughout the day and week
- Visits take place at least 1.5 meter (ie, 5 feet) distance, including from staff and other residents
- Visitors should be free from COVID-19 symptoms
- Visitors are obliged to wear a protective mouth mask for visiting residents who are difficult to instruct (eg, people with dementia)

Preconditions for organizations
- Should observe the regulations and keep in perspective the well-being of residents and family
- Sufficient personal protective equipment, thermometer assessment, and appropriate application of this
- Strict hygiene protocol
- Sufficient staffing
- Sufficient test capacity by Local Health Authority

Methods

This study used a mixed-methods approach, consisting of a questionnaire, telephone interviews, analyses of documentation (ie, local visiting protocols), and a WhatsApp group.

Setting and Sample

In total, 26 nursing homes were allowed to enlarge their possibilities for allowing visitors in their facility. See Table 1 for the characteristics of these nursing homes and their residents. These nursing homes were proportionally representative for the Netherlands as they were selected by their local Area Health Authority for participation. Each region within the Netherlands was represented.

In each nursing home, 1 individual was selected to fill out an electronic questionnaire and participate in a telephone interview. Nursing homes selected the person they considered to have the most information on the policy and local protocol for the facility and who was involved in the development of the local guidelines. The contact persons were nursing home managers (n = 16), local quality or policy officers (n = 8), or registered nurses (n = 2). All contact persons were invited to join a WhatsApp group in which participants could share experiences on the application of their local protocols in practice. They could also invite their colleagues to join the group.

Data Collection

Table 2 summarizes the data collection methods. An electronic questionnaire (Qualtrics Research Suite XM) was sent to each contact person of the nursing home, using personalized links. The questionnaire had 30 items and focused on the extent of performance. Questions were related to the elements of the local protocol for the nursing homes (19 statements, response options were yes/no/partly), its general characteristics, and the context of the nursing home facility. Respondents could fill in free text to explain their answers after each question. In addition, a telephone interview was conducted to gain insight into the reach; first experiences, including barriers and facilitators; and their overall opinion on the impact of the protocol on the well-being of residents, family caregivers, and staff (open-ended questions). Finally, a WhatsApp group was set up for contact persons, inviting them to share experiences, problems, and solutions they encountered while implementing the new guidelines within the context of their nursing home. Participants agreed that the content of the WhatsApp communications could be analyzed to gain insight into encountered barriers and facilitators during the application in practice.

Three weeks after visits were permitted again, the local Area Health Authority collected data on new COVID-19 infections for the 26 participating nursing homes (period May 11—June 5 2020). These data

Table 1
Description of Study Nursing Homes (n = 26)

Description of nursing homes	
Total number of beds on psychogeriatric wards of the nursing homes	1097*
Total number of beds on somatic wards of the nursing homes	589*
Number of beds per nursing home (mean, range)	77.9 (21-163)
Number of beds on psychogeriatric ward within a nursing home (mean, range)	43.9* (0-136)
Number of beds on a somatic ward within a nursing home (mean, range)	23.56* (0-54)
Type of nursing home:	
Regular wards of 10 residents or more	7
Small-scale, homelike wards of 6 or 7 residents having a household	4
Combination	15
Number of study nursing homes with any COVID-19 cases	5
Total number of residents in the nursing home infected with COVID-19 (mean, range)	1.12 (0-11)
Total number of residents in the nursing home that died due to COVID-19 (mean, range)	0.62 (0-5)
Description of residents	
Number of residents currently living in the nursing homes†	2011
Number of residents currently living on a psychogeriatric ward	1049
Number of residents currently living on a somatic ward	584
Number of residents have been infected with COVID-19	29
Number of residents that have died due to COVID-19	16

*These data were based on 25 nursing homes, as 1 nursing home with 76 beds and 72 residents did not distinguish between somatic/psychogeriatric wards and was therefore excluded from the analyses.

†Including residents with psychogeriatric/somatic diseases, residents for geriatric rehabilitation, respite care.

were compared with reports of national data, in which a voluntary registration of COVID-19 was set up, by temporarily extending 2 electronic patient file systems, covering most of the Dutch nursing homes.[2] An indication was calculated for the total number of new COVID-19 infections in Dutch nursing homes during the study period, comparing reports from May 12 with the most recent available data on June 2.[2,11]

Analyses

Descriptive statistics were calculated for responses on the questionnaires. Reach was calculated by dividing the total number of residents who had visitors by the total number of residents in the homes for which the ban was adjusted. Per element, it was calculated how many nursing homes had applied the measure within their local context. Data on the open-ended questions and data from the WhatsApp group were analyzed thematically within the research team.

Ethical Considerations

The ethics committee of Radboud University Medical Center approved the study protocol (2020-6549) and concluded that the study was not subject to the Medical Research Involving Human Subjects Act. Information about the study was provided per email to the respondents of the online survey. Participation was strictly voluntarily, and participants could withdraw from the study at any moment.

Results

Telephone interviews were conducted with contact persons of 26 nursing homes (100%), 24 electronic questionnaires were returned (92%), and for 23 nursing homes (88%) documentation, including local protocols, was received. In total, 30 persons participated in the WhatsApp group, representing 20 nursing homes (77%), of which 4 nursing homes were represented by 2 persons and 3 nursing homes were represented by 3 persons.

Visits

In total, during the first week of the pilot, 954 residents had received a visitor (57%). Differences were observed in how nursing homes selected visitors. In total, 21 locations allowed visitors, in principle, for all of their residents. However, for 6 locations visits were permitted for 80% or more of the residents. The other 15 locations only partially allowed visitors, varying from 20% to 70% of residents. Decisions to not permit visitors were made primarily because more time was needed to organize the logistics (eg, preparation of staff and procedures, communication with all stakeholders). Four locations only had a specific selection of visitors, for example those, "who needed it the most" or because a COVID-19 infection was detected in a section of the nursing home. Other visits remained via window visiting and video calls. In 1 nursing home, residents had more than 1 designated visitor, and more than 1 visitor was allowed in the nursing home.

In most nursing homes, visits took place in the residents' own room. In an additional 4 locations, residents could receive visitors in their own room or in another space (eg, restaurant). One location indicated that residents and their visitor could take a walk outside. Eight locations had a specifically designated room for visitors.

On average, visits lasted 1 hour, of which 15 minutes were dedicated to entering and leaving the nursing home. This included the time for the check-in (symptom screening, walk to the resident, and leaving the building afterwards). In effect, most visits were restricted to 45 minutes.

Compliance

The results showed a variation in how the national guideline was applied in the local context of nursing homes, especially regarding the

Table 2
Overview of Data Collection Methods

Method	Content	Examples
Telephone interview	Visits	Number, location of visits
	Compliance with local protocol	To what extent did visitors comply with the local protocol?
	Well-being of residents, family and staff	What is your impression of the impact of allowing visitors on the well-being of residents, family members, and staff?
Questionnaire	Context of the nursing home	Number of beds, type of nursing homes, own bedrooms, schedule of staff
	Application of national guidelines to local context	Temperature of visitors is measured at entrance; visits are supervised
Documentation	Local protocols, information letters to visitors, other documentation that the nursing home has used	n/a
WhatsApp group	Discussion of real-time problems, experiences, and solutions of the participating nursing homes	n/a

Table 3
Content of Local Visitor Guidelines and Compliance With Guidelines*

Content of National Guideline	Number (%) of Homes Applying This in the Local Context
Only 1 visitor per resident	25 (100)
Visitors are screened on active COVID-19 symptoms at the visit (eg, coughing)	24 (96)
Visitors' body temperature is measured	22 (88)
Visitors have to sanitize their hands	25 (100)
Visitors wear masks	
Yes	14 (56)
Partly	6 (24)
No	4 (16)
Missing	1 (4)
Visitors wear gloves	6 (25)
Visits are supervised	
Yes	6 (24)
Partially	9 (36)
No	10 (40)

*For 1 nursing home, all data (both electronic questionnaire and local documentation) were missing.

use of personal protective equipment and the supervision of visits (see Table 3). In some nursing homes, all staff and visitors were obliged to wear a protective mouth mask (n = 11), whereas in others protective mouth masks were only obliged for visitors of residents with dementia. All visitors were screened on active COVID-19 symptoms, although in 2 nursing homes this did not happen at the visit but only 24 hours before the visit via telephone. The vast majority also took the temperature at the visit (n = 22). In 10 nursing homes, the visits were unsupervised. Visits were in the residents' own room, and nursing homes explained they wanted to respect the privacy of the residents.

> I don't mind what they [the visitor and resident] do in their own room, it's their responsibility. (manager, nursing home 7)

The other nursing homes had some form of supervision during the visits, for example, by entering the room after 15 minutes. One respondent indicated that the visit was supervised at an "appropriate distance," without defining what was meant by appropriate.

Respondents indicated that residents, visitors, and staff were in general compliant with the local protocol guidelines. No major incidents were reported. However, this was difficult to check, for example, when visits were in the private room of residents and staff did not supervise. In practice, deviations to the local protocol were observed as respondents indicated. For example, visitors did not use protective measures during the whole visit. Especially, the protective mouth masks were perceived as difficult to comply with in certain circumstances. A common situation was sharing coffee or food, which was permitted in some nursing homes and in which case wearing a mask was impractical. Furthermore, a small minority of homes did allow more than 1 designated visitor, when confronted with more than 1 visitor. Finally, physical contact did occur according to some respondents (including giving hugs) and they did allow this.

Respondents reported a significant increase in workload for staff involved in the preparations (eg, planning of visits, informing relatives and staff) and putting all measures in practice (eg, registration and supervision), which was perceived as an important barrier. Several nursing homes had dedicated specific staff to organize the visits. One nursing home had a designated coordinator who guided the visits, screened visitors, had conversation with individual residents regarding risks, and added all information in the electronic patient file. Other nursing homes had mobilized hostesses who organized visits, coordinated on site, and performed the COVID-19 screening.

Three main topics were discussed in the WhatsApp group:

- organizing the visits (eg, planning and registration, routing of visitors and staffing, administration), as this was perceived as complicated and time consuming. Digital solutions for the planning and administration were highly warranted and searched.
- Evaluation of the visits, including how to evaluate for nursing homes themselves what the experiences of family members were. Two nursing homes had specified in their local protocol to provide follow-up care to family after the visit. This included having a conversation directly after the visit, through reporting in a "digital conversation booklet" or via telephone calls afterwards.
- Use of personal protective measures. Personal protective equipment is scarce, and respondents debated whether the nursing home should supply this. Respondents indicated that for residents with dementia, who were difficult to instruct, protective mouth masks were supplied by the nursing home organization to visitors.

Impact on Well-Being

All nursing homes were unanimously positive about the possibility to let visitors back in the nursing home. All respondents indicated that residents, family, and staff in their nursing homes were mainly positive that family members were allowed back in the nursing home. Residents experienced joy, as did the staff, although some although stated that it was difficult for residents and family that they were not able to touch each other and have physical contact.

> The visits have a positive influence. Drinking a cup of coffee together, being together in the same space without a screen in between. It seems a small step, but it feels as a giant emotional step. (manager, nursing home 17)

> Residents, family, and staff perceive it mainly as positive. For most residents, the visit is a surprise … residents with dementia find it difficult not to touch their family member. (nurse, nursing home 1)

> A staff member cannot replace a family member… Since our residents know that they are allowed to receive a visitor again, they are in a different mood and have something to look forward to again. (manager, nursing home 6)

Family members and residents were in general emotional when seeing each other after such a long time. They all regarded the visit as a huge added value above other creative solutions such as window visiting and video conferencing. The personal contact and better opportunity to speak with each were highly valued. However, physical contact was missed, as was the opportunity to go outside the nursing home. In some cases, it was reported that residents did not recognize their family due to the long period of visit restrictions.

> It was an emotional reunion. Mister J. did not recognize his son as they had not seen each other for 10 weeks… He was crying and could not understand how he could forget about his son. For the son, this was difficult too. Team leader, Nursing Home 26

However, realizing the local protocol in practice was stressful. Both visitors and staff worried about the risk of infection. Respondents indicated that a minority of family was too afraid to visit. Some staff worry about their own health, or the health of their spouse, when they are in a risk category.

New COVID-19 Infections

No new COVID-19 infections were reported by the local Area Health Authority for the 26 participating nursing homes 3 weeks after visits were allowed. In comparison, at a national level, 732 new COVID-19 cases were reported in nearly the same period, based on electronic patient files.[2,11] Overall, a decreasing national trend was reported in new COVID-19 cases, with 421 in week 1 after visits were allowed,[12] 231 in week 2, and only 80 new cases in week 3.[2,13]

Discussion

This study is the first to report on compliance and experiences with allowing visitors back in nursing homes after a ban during the COVID-19 pandemic. Results indicate that the national guidelines on how and under which circumstances visitors were allowed again in the Netherlands were applied differently across individual locations—regarding, for example, the use of personal protective equipment and the location and supervision of visits. In general, however, experiences were very positive. All nursing homes recognized the added value of real and personal contact between residents and their loved ones. Compliance with local guidelines was sufficient to good, based on the first results, with no major incidents.

Some methodologic limitations must be considered. First, potential effects of allowing visitors on infection rate could not be considered. As the current study pertained to the first 2 weeks of the pilot, it is difficult to examine the relationship with possible infections. Furthermore, nursing staff also go in and out of nursing homes, which makes a causal interpretation regarding infections challenging. However, it is promising that the most recent data of the Local Health Authorities indicated no new infections in the 26 nursing homes almost 4 weeks after visitors were allowed again. Thus, allowing visitors has not led to an increase in infections until now. Second, the nursing homes in this study had a relatively brief period of preparing for the implementation of guidelines (approximately 1 week) as the pilot happened under great societal pressure. In addition, there has been a lack of sufficient protective equipment in nursing homes in the Netherlands, as in other countries.[5,14] This might have influenced the application of the national guideline in the local context.

Every day, nursing homes face the dilemma of infection prevention vs allowing personal contact for residents. Social isolation is detrimental to older people living in nursing homes. Personal interactions are meaningful activities and are crucial to establishing residents' quality of life.[15,16] However, during the COVID-19 pandemic, these aspects have receded to the background. Furthermore, in the Netherlands, anecdotal evidence from practice indicate that the ban on visitors might have had a varying impact on residents. Preliminary results of a survey about challenging behavior among 300 psychologists and elderly care physicians working in nursing homes show reported increases as well as decreases in challenging behavior and also initial decreases followed by an increase.[17] Nursing home administrators should be careful in drawing conclusions and making policy based on anecdotal reports, as more research is needed to disentangle the impact of social isolation and visitor restraining on residents' well-being. It is important that long-term care facilities recognize the role that family members play as partners in care.[18]

Conclusion and Implications

The Dutch government has decided as of May 25 that all nursing homes in the Netherlands be allowed to have visitors using this national guideline. Results of the current study have been used to formulate this advice. An adapted version of the guideline was developed, in which the need for expansion of the regulations was requested, including the need for residents to go outside with their visitors. At the moment, it is unclear whether nursing homes will apply this in their local context and whether the decreasing trend will remain. Other countries are currently also piloting allowing visitors back in the nursing home. More research is needed on long-term effects, including insights into infection rates and in-depth experiences of family, residents, and staff.

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