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POINT OF VIEW

STRATEGY FOR RESIDENTS OF NURSING HOMES FACING THE SARS-COV2 EPIDEMIC IN FRANCE

S. VIENNE-NOYES[1,*], L. ANDRE[1,*], Y. ROLLAND[1]

1. Service de medecine Interne et Gerontologie Clinique (CHU Toulouse) – Gerontopôle deToulouse, France; * Co-primary authors. Corresponding author: Sara Vienne-Noyes, Service de medecine Interne et Gerontologie Clinique (CHU Toulouse) – Gerontopôle deToulouse, France, vienne-noyes.s@chu-toulouse.fr

In December 2019, a new virus - SARS-Cov 19 – appeared, which rapidly evolved from local spread in China to a pandemic. In France, the first clusters were identified at the beginning of February, mainly in the North-East, causing a massive influx of infected patients in hospitals. Significant disparities have been observed between the 8 regions of France. On March 17, during the national confinement order for the general population in France, nearly 1,000 cases were already confirmed in some parts of the Northeast, while other parts in the south recorded fewer than 50 cases (1).

The elderly are not only more easily affected by SARS-Cov 19, but are also more at risk of reporting serious forms and complications (2–5) due to physiological aging, impaired immune function and multi-morbidities. The mortality rate from covid-19 infection has been reported to be as high as 30% in this population (6). Preventing the entry of the virus into Nursing Homes (NHs) and avoiding the chain of contamination within the NHs quickly emerged as a priority in the strategy to combat the epidemic in France.

In France, the proportion of elderly people living in NHs is high. Within 10,000 French NHs, approximately 600,000 very elderly, fragile and mostly dependent people lived their last years. Their vulnerability is reflected in an annual hospitalization rate close to 30% (7). These structures are piloted by four leading actors: the coordinating doctor (a doctor with modest training in geriatrics and whose role is to develop the care plan, give an opinion on admissions, coordinate the work of teams and participate to good medical practice), the family physician (who takes care of medical complications and ensures the follow-up and prescription of their patients), a coordinating nurse and an administrative director. The paramedical team (nurses, nursing aides), whose supervision ratio is approximately 0.6 carers per resident (8), provides daily care and participates in the life project. The collaboration between these different partners was challenged during the epidemic. This organization specific to the NHs had to integrate into an often-saturated care sector and only partially allowing recourse to hospitalizations.

During the epidemic, NHs had to adapt to this exceptional situation by modifying the geriatric partnership with the closest hospital, particularly limiting the use of transfers to the emergency departments by developing a strategy to prevent the entry of the virus into the NHs, limiting its spread during the occurrence of an incidental case and optimal management in the NH of residents infected with COVID.

Before the containment of the general population, the containment strategy for nursing homes was decided on March 11, in order to reduce the risk of viral entry into NHs by outside visitors. Thus, visits by relatives of NH's residents were prohibited. In the same vein, the role of the coordinating physician has been expanded to limit the non-emergency visits of family physicians, who often had been in contact and infected by contaminating patients whom they had seen during their exercise in the community. This measure was associated with the strict application of barrier protection gestures for residents but also for staff: wearing a mask, regular hand hygiene and social distancing. These measures were also to be applied by NH staff outside the workplace. Access to these structures could only be done in the absence of symptoms suggestive of COVID or if a COVID-19 infection was cleared beforehand by rt-PCR test. In the absence of COVID infection among residents or caregivers, confinement in rooms was advised. This room confinement was applied to the entire NH from the first confirmed case of COVID among at least one resident or caregiver.

To support NHs and apply the NH epidemic prevention strategy, numerous COVID NH support platforms have been rapidly created in all regions of France. These platforms were run by hospital geriatricians and geriatric nurses, reachable on a single number in support to coordinating physicians. The missions of these platforms were threefold. 1) Provide expertise and advice so that the prevention strategy is perfectly applied. This action was mainly useful during the first weeks of the epidemic, when NHs were not yet trained or organized to best prevent the entry and spread of the virus. 2) Help NH to detect affected residents. At this point, the platform could send to the NH site a nurse in charge of carrying out the r-PCR screening of the suspect case. During the same time, the nurse trained on hygiene and dressing measures and trained the NH team in the technique of deep nasal sampling. In the event of a reported case of COVID+ among NH staff or among residents, a massive screening of all residents and carers was organized within 24-48 hours. The platform is responsible for helping the NH to adapt their care organization by putting together the sick residents in the same area and removing caregivers who tested positive for COVID. If possible, the first positive

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resident (if he was unique in NH) would be taken to a COVID hospital unit without going through the emergency room. 3) Finally, the platform has the role of directly helping and advising doctors to make collegial ethical decisions, or to take care of infected residents with complicated forms of covid-19 pneumonia (desaturation, vigilance) or behaviors at risk of transmission (wandering, physical aggression ...). On this occasion, telephone advice and video-conferences with the NH teams were organized. Access to hospitalizations was discussed on this occasion.

The strategy deployed in the different regions of France was rapidly evolving and varied from one region to another. Analysis of the coming months will certainly allow us to better define the most useful actions. The strategy is mainly based on the screening of potentially affected caregivers and their extraction from NH. Asymptomatic carriers have been clearly identified as the Achilles heel of the COVID epidemic prevention strategy in nursing homes (9). The value of the strategy of exfiltration of the first NH resident case into a COVID unit is obvious in theory but could not be applied systematically, due to the lack of availability of hospital beds.

The COVID-19 epidemic is an unprecedented event for residents, NH staff, and families. The current estimate shows a rate 7,000 resident deaths. The effects of the measures taken, such as confinement in a room for more than 2 months, are currently being assessed. However, this crisis made it possible to deploy new collaborative working strategies between the hospital and the NHs such as telemedicine, or the organization of fast-track avoiding transfer to the emergency room. Hopefully these improvements in the care of residents of NH will be sustained beyond the health crisis.

Conflict of interest: None

References

1. Agence régionale de santé | Agir pour la santé de tous [Internet]. [cité 7 mai 2020]. Disponible sur: https://www.ars.sante.fr/
2. Article: COVID-19 in Older Adults - Key Points for Emergency Department Providers [Internet]. The John A. Hartford Foundation. [cité 7 mai 2020]. Disponible sur: https://www.johnahartford.org/dissemination-center/view/covid-19-in-older-adults-key-points-for-emergency-department-providers
3. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, Wang B, Xiang H, Cheng Z, Xiong Y, Zhao Y, Li Y, Wang X, Peng Z. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus–Infected Pneumonia in Wuhan, China. JAMA. 17 mars 2020;323(11):1061-9.
4. Stancati M. Italy, With Aging Population, Has World's Highest Daily Deaths From Virus. Wall Street Journal [Internet]. 9 mars 2020 [cité 7 mai 2020]; Disponible sur: https://www.wsj.com/articles/italy-with-elderly-population-has-worlds-highest-death-rate-from-virus-11583785086
5. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) [Internet]. [cité 7 mai 2020]. Disponible sur: https://www.who.int/publications-detail/report-of-the-who-china-joint-mission-on-coronavirus-disease-2019-(covid-19)
6. McMichael TM, Currie DW, Clark S, Pogosjans S, Kay M, Schwartz NG, Lewis J, Baer A, Kawakami V, Lukoff MD, Ferro J, Brostrom-Smith C, Rea TD, Sayre MR, Riedo FX, Russell D, Hiatt B, Montgomery P, Rao AK, Chow EJ, Tobolowsky F, Hughes MJ, Bardossy AC, Oakley LP, Jacobs JR, Stone ND, Reddy SC, Jernigan JA, Honein MA, Clark TA, Duchin JS. Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington. N Engl J Med. 27 mars 2020;
7. Rolland Y, Andrieu S, Crochard A, Goni S, Hein C, Vellas B. Psychotropic drug consumption at admission and discharge of nursing home residents. J Am Med Dir Assoc. mai 2012;13(4):407.e7-12.
8. La situation des EHPAD en 2017 (rapport) | [CNSA] [Internet]. [cité 14 mai 2020]. Disponible sur: https://www.cnsa.fr/node/5106
9. Gandhi M, Yokoe DS, Havlir DV. Asymptomatic transmission, the Achilles' heel of current strategies to control Covid-19. N Engl J Med. 2020 Apr 24.