



Health Consequences Of Distancing And Restrictions Of Visiting Older Patients In An Acute Medical Unit During SARS-Cov-2 Pandemic. A Case Report And Review Of The Literature

Rhita Bennis Nechba^{1,2}, Naoufel Madani^{1,2,3}, Jihane Belayachi^{1,2,3}, Redouane Abouqal^{1,2,3}

¹ Acute Medical Unit, Ibn Sina University Hospital, 10000, Rabat, Morocco

² Mohammed V University, 10000, Rabat, Morocco

³ Laboratory of Biostatistics, Clinical, and Epidemiological Research, Faculty of medicine and pharmacy- Mohamed V University Souissi, 10000, Rabat, Morocco

Corresponding author: Rhita Bennis Nechba at Acute Medical Unit, Ibn Sina University Hospital, 10000, Rabat, Morocco

ABSTRACT:

Background : aging increases chances of developing Severe Acute Respiratory Syndrome-coronavirus 2 (SARS-CoV-2) and its adverse health outcomes including hospitalization, Acute medical Unit admission, and death. Quarantine measures implemented impact health support of older patients, especially patients who are frail and dependent.

Case report: A 80-year-old woman was admitted to our Acute Medical Unit complaining of SARS-CoV-2. Her management was difficult. We discuss through this case, effects of social isolation, imposed during pandemic, for older patients, their families and health professionals in an acute medical unit. Then we give some solutions to improve this state.

Conclusion: We should provide specific guidance and practice recommendations in the facilitation of families presence to allow them to continue taking care of their relatives, during this difficult time of SARS-CoV-2 pandemic.

Abbreviations : COVID-19 : coronavirus disease 2019, SARS COV 2 : Severe Acute Respiratory Syndrome-coronavirus 2, ICU : intensive care unit, AMU : acute medical unit

Keywords: distancing, older patients, acute medical unit, Severe Acute Respiratory Syndrome-coronavirus 2 pandemic.

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I. BACKGROUND :

Coronavirus 2019 is a highly contagious respiratory pathogen that causes a disease that has been termed the 2019 coronavirus disease (COVID-19) (1). The severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) pandemic led to significant morbidity and mortality and had serious health, psycho-social and socio-economic consequences (1). Old patients are particularly vulnerable to the novel virus, in fact, aging is an important risk factor for SARS-CoV-2 and its adverse health outcomes including hospital admission, intensive care unit (ICU) hospitalisation, and death (1,2). Old patients admitted to ICU need to be accompanied and supported during their hospitalization. Patients unaccompanied had poorer outcomes than patients accompanied (3). This support, provided by family members, includes mainly related care dependency, intimate care and psychological support. The importance of visitation in ICU and its beneficial effects of visitation on patients and their families, has been reported in previous research (4). Family and patient outcomes were improved when open visitation in adult ICU was allowed (5). But during the COVID-19 pandemic, the World Health Organization recommends that visitors should not be allowed to visit suspected or confirmed patients with COVID-19, unless strictly necessary (6). Hospitals have so reduced visitation, and some old patients died in critical care isolated from their families (7). As in many countries, families in Morocco were currently restricted from in-person visiting to keep people safe and to prevent virus spread. Also because of the limited supply of personal protective equipment. In this new situation, the need of social distancing and public safety

leads to important restrictions on the physical presence of families of hospitalized old patients. COVID-19 has seriously changed the place and the part of families in care of their hospitalized old patients. It impact procedures, protocols and interaction between medical staff and next of kin. We report a case of a woman in her 80s who came to the hospital complaining of SARS-CoV-2. And we discuss through this case the health consequences of distancing and restrictions of visiting older patients in an acute medical unit (AMU) during SARS-CoV-2 pandemic.

II. CASE REPORT :

A 80-year-old woman was admitted to our AMU because of SARS-CoV-2. She lived before her hospitalization with her daughter and son. She did not had any cognitive disorders. Despite being a dependent, bedridden and frail patient, Her daughter and son were not involved in her care because stricter restrictions were imposed to prevent the viral spread. But they asked every day about her outcome. She did not take any drugs at home. She presented signs of Covid 19 eighteen days before her admission in hospital. A complex medication regimen leading to harmful side-effects was prescribed during her hospital stay and needed a careful monitoring. Many complications occurred like nosocomial infections, undernutrition, pressure ulcer, adverse drug events and depression. Finally she presented a refractory shock and died from multivisceral failure syndrome 25 days after her admission.

III. DISCUSSION

Emergency care is a source of difficulties for old people, families and carers. Visiting restrictions during SARS-CoV-2 pandemic worsened the situation and had many consequences.

1- Consequences for our patient:

a) **Delayed consultation:** Our patient consulted eighteen days later after the beginning of symptoms even if she lived with her family. Elderly patients present usually atypical signs of covid -19 and need careful observation and early intervention to prevent the potential development of SARS-CoV-2 (8). Quarantine measures were implemented to keep old people safe but distancing could delay early health support.

b) **Depression :** our patient presented depression during her hospitalization. The progress of the pandemic is unknown and people dread much the isolation. Feelings of loneliness is an independent risk factor for obesity, cardio-vascular disorders, sensory loss, connective tissue and autoimmune disorders (9,10). The social isolation leads also to chronic loneliness and boredom, which if long enough can have detrimental effects on physical and mental well-being. Also chronic loneliness reduces physical activity and rises risk of frailty and fractures (9).

c) **Nosocomial infection, Undernutrition and pressure ulcer :** the risk of microbial contamination is high in ICU. But, when medical professionals allow visits in ICU, the reduction of anxiety might decrease cardiovascular complications and the hormonal profile of patients become more favorable (10). While the possibility of septic complications does not rise (10). The involvement of families in care of their sick relatives was often essential. They offer more reassurance and comfort to patients, they nursed and fed them, they reduce the risk of cross-infection, more over, they defend the rights of their relatives (11).

d) **Adverse drug events :** our patient presented a severe form of COVID-19. She received many drugs and needed a careful monitoring. Old patients are at risk of experiencing adverse drug events (12). Patient and family interview, may serve as baseline information to optimize medication use in the geriatric population (13).

e) **Delirium :** The isolation and the use of personal protective equipment of the healthcare professionals might increase the incidence of delirium among COVID-19 hospitalized patients (14). The support of families can be important to prevent and treat delirium. More research are needed about how to engage families in the care of patients who present delirium during COVID-19 pandemic.

2- Consequences for family:

Restriction or prohibition of family visiting to our AMU during the COVID-19 pandemic poses substantial barriers to communication with families. The unfamiliar environment of an AMU, the course of illness, uncertainty about the patients' future, may have an impact on the families' psychological conditions like stress, anxiety, depression, sleep disturbances and posttraumatic stress disorder (15). In several studies, nurses reported that family involvement in care is important as they often gain a lot of worthwhile knowledge about a patient and it gives family a feeling of being useful (16-18).

3- **End of life :** Approaches during healthcare must respect ethical goals. The patient voice must help and guide decision-making (19). Families could also be concerned in decision making to stop or continue lifesustaining treatment (20). Families are generally vulnerable when their sick relative is dying. Infection prevention and control measures cause an additional distress to families and clinicians when a COVID-19 positive patient dies because of prohibiting or limiting family presence (21). Families wish to be present to see, comfort, protect and remember the detail of the dying person. It is a hard experience for the patient and families

(22). The absence of family members is a barrier of discussion of goals of care according to patient's own wishes (23, 24).

4- **Discharge** : Our patient died. But in case of discharge home most patients with COVID-19 need care. Family support may be very important to help and to rehabilitate the patient during transitions.

5- **Consequences for health professionals** : the penury of medical resources, the overwork and social restrictions participated in increasing stress in medical team during this pandemic. Moral distress may occur also when professionals could not accomplish their moral obligation to a patient such as providing the best care possible, because of forces that are out of their control (25).

Solutions : In most countries the pandemic is regressing, but COVID-19 infection is not eliminated and new outbreaks are possible. It is necessary to search better policies to protect the rights of old patients and to provide them a better care. It is primordial that they do not experience more mental, physical and social discrimination at a time when their support needs are enhanced (26). We need to discuss and reconsider how families could involve in care of hospitalized older adults during and after the COVID-19 pandemic.

Families should be educated about signs of covid in old patients to allow them an adequate and prioritized access to healthcare, leading to earlier diagnosis and treatment and shorter hospital stays. Proper education enables older people and their families to better understand how they can cope with the medical staff, and is necessary to reduce their fear and anxiety. Specific and online training can be created and offered regionally such as that provided by the World Health Organization (27). Enhancing access and developing a more consistent approach to family virtual AMU visiting could improve quality of care, both during and outside of pandemic (28). Patients and families must take part in decision-making. Regular communication between patients, families and staff is essential to provide social, spiritual, physical and psychological aspects. We can use video calling, and facilitate the involvement of families especially in situations of delirium and in end-of-life care (16). Digital communication presents a crucial tool but old people need to be supported to use such technology in order to maintain crucial relationships during the pandemic (29). The use of internet technology needs to be controlled, to protect patients' privacy. Virtual family and patient teaching should be integrated into the usual routine (30). Finally, the rights of old patients are secured by laws in many countries. And to protect them, professionals must inform local authorities if they suspect a continual neglect (31). We should ensure that older adults are aware of the resources available to them and that their needs are being met. We should support personal protective equipment supplies, infection prevention training and advising, staffing support, alternate care settings, mental and behavioral health support for patients, families and staff, We could create security and family spaces, clinical support via telehealth education and geriatrician site visits (32).

IV. CONCLUSION :

We need to pay particular attention to old patients during this difficult time of the COVID-19 pandemic. We should provide specific guidance and practice recommendations in the facilitation of family presence in AMU.

REFERENCES :

- [1]. Yiyin Chen, Sabra L. Klein, Brian T. Garibaldi, Huifen Li, Cunjin Wu, Nicole M. Osevala, Taisheng Li, Joseph B. Margolick, Graham Pawelec, Sean X. Leng. Aging in COVID-19: Vulnerability, immunity and intervention. *Ageing Research Reviews* 65 (2021) 101205.
- [2]. Zante B, Camenisch S, Jeitziner MM, Jenni-Moser B, Schefold JC. Fighting a family tragedy: family-centred care in times of the COVID-19 pandemic. *Anaesthesiol Intensive Ther.* 2020;52(4):336-338. doi: 10.5114/ait.2020.100501. PMID: 33165884
- [3]. Park, M., Giap, T.T., Lee, M., et al., 2018. Patient- and family-centered care interventions for improving the quality of health care: a review of systematic reviews. *Int. J. Nurs. Stud.* 87, 69–83. doi: 10.1016/j.ijnurstu.2018.07.006 .
- [4]. S K Simon¹, K Phillips, S Badalamenti, J Ohlert, J Krumberger. Current practices regarding visitation policies in critical care units. *Am J Crit Care.* 1997 May;6(3):210-7. PMID: 9131200
- [5]. Milner KA, Marmo S, Goncalves S. Implementation and sustainment strategies for open visitation in the intensive care unit: A multicentre qualitative study. *Intensive Crit Care Nurs.* 2021 Feb;62:102927. doi: 10.1016/j.iccn.2020.102927. Epub 2020 Aug 24. PMID: 32855008; PMCID: PMC7444949
- [6]. World Health Organization. Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19): interim guidance. Geneva. 2020
- [7]. Bloomer MJ, Bouchoucha S. Australian College of Critical Care Nurses and Australasian College for Infection Prevention and Control position statement on facilitating next-of-kin presence for patients dying from coronavirus disease 2019 (COVID-19) in the intensive care unit. *Aust Crit Care.* 2021 Mar;34(2):132-134. doi:10.1016/j.aucc.2020.07.002. Epub 2020 Jul 16. PMID: 32826150; PMCID: PMC7365101
- [8]. Li X, Xu S, Yu M, Wang K, Tao Y, Zhou Y, Shi J, Zhou M, Wu B, Yang Z, Zhang C, Yue J, Zhang Z, Renz H, Liu X, Xie J, Xie M, Zhao J. Risk factors for severity and mortality in adult COVID-19 inpatients in Wuhan. *J Allergy Clin Immunol.* 2020 Jul;146(1):110-118. doi: 10.1016/j.jaci.2020.04.006. Epub 2020 Apr 12. PMID: 32294485; PMCID: PMC7152876
- [9]. Debanjan Banerjee¹ and Mayank Rai. Social isolation in Covid-19: The impact of loneliness. *International Journal of Social Psychiatry* 2020, Vol. 66(6) 525–527. DOI: 10.1177/0020764020922269
- [10]. Stefano Fumagalli¹, Lorenzo Boncinelli, Antonella Lo Nostro, Paolo Valoti, Giorgio Baldereschi, Mauro Di Bari, Andrea Ungar, Samuele Baldasseroni, Pierangelo Geppetti, Giulio Masotti, Riccardo Pini, Nicolò Marchionni. Reduced cardiocirculatory complications with unrestrictive visiting policy in an intensive care unit: results from a pilot, randomized trial. *Circulation.* 2006 Feb 21;113(7):946-52. PMID: 16490836. DOI: 10.1161/CIRCULATIONAHA.105.572537

- [11]. Tallon MM, Kendall GE, Snider PD. Rethinking family-centred care for the child and family in hospital. *J Clin Nurs*. 2015 May;24(9-10):1426-35. doi: 10.1111/jocn.12799.PMID: 25753610
- [12]. Rahman et al. The Double Burden of the COVID-19 Pandemic and Polypharmacy on Geriatric Population – Public Health Implications Therapeutics and Clinical Risk Management. 2020:16 1007–1022
- [13]. Mlodinow SG, Linn BS, Mahvan T, Ramer LN, Ngaima NM. Strategies to reduce and prevent polypharmacy in older patients. *J Fam Pract*. 2019;68(8):429- 40
- [14]. Benjamin C. Mcloughlin, Amy Miles, Thomas E. Webb, Paul Knopp, Clodagh Eyres, Ambra Fabbri, Fiona Humphries, Daniel Davis. Functional and cognitive outcomes after COVID-19 delirium. *Eur Geriatr Med*. 2020; 11(5): 857–862. Published online 2020 Jul 14. doi: 10.1007/s41999-020-00353-8
- [15]. Hoffmann M, Jeitziner MM, Riedl R, Eller P, Amrein K. Psychological symptoms in relatives of critically ill patients (ICU families): a prospective multicenter study. *Intensive Care Med* 2020; 46: 1060-1062. doi: 10.1007/s00134-020-05997-5
- [16]. Maaskant JM, Jongerden IP, Bik J, Joosten M, Musters S, Storm-Versloot MN, Wielenga J, Eskes AM; FAM-Corona Group. Strict isolation requires a different approach to the family of hospitalised patients with COVID-19: A rapid qualitative study. *Int J Nurs Stud*. 2020 Dec 24;117:103858. doi: 10.1016/j.ijnurstu.2020.103858. Epub ahead of print. PMID: 33621720; PMCID: PMC7834466
- [17]. Broekema S, Paans W, Oosterhoff AT, Roodbol PF, Luttk MLA. Patients' and family members' perspectives on the benefits and working mechanisms of family nursing conversations in Dutch home healthcare. *Health Soc Care Community*. 2021 Jan;29(1):259-269. doi: 10.1111/hsc.13089. Epub 2020 Jul 7. PMID: 33034928
- [18]. Broekema S, Paans W, Roodbol PF, Luttk MLA. Effects of family nursing conversations on families in home health care: A controlled before-and-after study. *J Adv Nurs*. 2021 Jan;77(1):231-243. doi: 10.1111/jan.14599. Epub 2020 Oct 17. PMID: 33068016.
- [19]. Bardon E. An ethical approach to considering family presence during COVID-19. *Health Manage Forum*. 2020 Dec 23:840470420980655. doi: 10.1177/0840470420980655. Epub ahead of print. PMID: 33353414
- [20]. Kirchhoff KT, Kowalkowski JA. Current Practices for Withdrawal of Life Support in Intensive Care Units. *Am J Crit Care*. 2010; 19:532–541
- [21]. Hart JL, Turnbull AE, Oppenheim IM, Courtright KR. Family-Centered care during the COVID-19 era. *J Pain Symptom Manag* 2020. <https://doi.org/10.1016/j.jpainsymman.2020.04.017>. <http://www.sciencedirect.com/science/article/pii/S0885392420302086>.
- [22]. Donnelly S, Dickson M. Relatives' matched with staff's experience of the moment of death in a tertiary referral hospital. *QJM* 2013;106(8):731-6. <https://doi.org/10.1093/qjmed/hct095>.
- [23]. Life Lines Team comprising. Restricted family visiting in intensive care during COVID-19. *Intensive Crit Care Nurs*. 2020 Oct;60:102896. doi: 10.1016/j.iccn.2020.102896. Epub 2020 May 31. PMID: 32601012; PMCID: PMC7261454
- [24]. Bloomer MJ, Bouchoucha S. Australian College of Critical Care Nurses and Australasian College for Infection Prevention and Control position statement on facilitating next-of-kin presence for patients dying from coronavirus disease 2019 (COVID-19) in the intensive care unit. *Aust Crit Care*. 2021 Mar;34(2):132-134. doi: 10.1016/j.aucc.2020.07.002. Epub 2020 Jul 16. PMID: 32826150; PMCID: PMC7365101
- [25]. Montes MT, Herranz-Rubia N; NeNe Nursing Group. Neonatal nursing in the COVID-19 pandemic: can we improve the future? *J Neonatal Nurs*. 2020 Oct;26(5):247-251. doi: 10.1016/j.jnn.2020.07.005. Epub 2020 Jul 10. PMID: 32837225; PMCID: PMC7351431
- [26]. Gulati G, Fistein E, Dunne CP, Kelly BD, Murphy VE. People with intellectual disabilities and the COVID-19 pandemic. *Ir J Psychol Med* [Epub ahead of print] 27 May 2020. Available from: <https://doi.org/10.1017/ipm.2020.66>
- [27]. World Health Organization. Disability Considerations During the COVID-19 Outbreak 2020. WHO, 2020 (<https://www.who.int/publications/i/item/WHO-2019-nCoV-Disability-2020-1>)
- [28]. Louise Rose 1, Lisa Yu 2, Joseph Casey 2, Amelia Cook 3, Victoria Metaxa 4, Natalie Pattison 5, Anne Marie Rafferty 3, Pam Ramsay 6, Sian Saha 7, Andreas Xyrichis 3, Joel Meyer 8. Communication and Virtual Visiting for Families of Patients in Intensive Care during COVID-19: A UK National Survey. *Ann Am Thorac Soc*. 2021 Feb 22. doi: 10.1513/AnnalsATS.202012-1500OC. PMID: 33617747
- [29]. Banerjee D, Rai M. Social isolation in Covid-19: the impact of loneliness. *Int J Soc Psychiatry* 2020; 66: 525–7
- [30]. Tedesco B, Borgese G, Cracco U, Casarotto P, Zanin A. Challenges to delivering family-centred care during the Coronavirus pandemic: Voices of Italian paediatric intensive care unit nurses. *Nurs Crit Care*. 2020;1–3. <https://doi.org/10.1111/nicc.12578>
- [31]. Han SD, Mosqueda L. Elder Abuse in the COVID-19 Era. *J Am Geriatr Soc*. 2020;68(7):1386-7
- [32]. Milner KA, Marmo S, Goncalves S. Implementation and sustainment strategies for open visitation in the intensive care unit: A multicentre qualitative study. *Intensive Crit Care Nurs*. 2021 Feb;62:102927. doi: 10.1016/j.iccn.2020.102927. Epub 2020 Aug 24. PMID: 32855008; PMCID: PMC7444949