

Benefits and Risks of Visitor Restrictions for Hospitalized Children During the COVID Pandemic

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To control the spread of severe acute respiratory syndrome coronavirus 2, the virus responsible for coronavirus disease 2019, many hospitals have strict visitor restriction policies. These policies often prohibit both parents from visiting at the same time or having grandparents or other family members visit at all. We discuss cases in which such policies created ethical dilemmas and possibly called for compassionate exceptions from the general rules.

abstract

As hospitals and public health systems desperately seek to control the spread of severe acute respiratory syndrome coronavirus disease 2, the virus responsible for coronavirus disease 2019 (COVID-19), visitor restriction policies have become widespread in the adult and pediatric settings. These policies vary widely. In the pediatric setting, they often include limitations on the number of visitors that any child can have. They only allow visitors who serve an essential care role for the child, with exceptions made for compassionate reasons such as end-of-life visits. They limit any visitors with COVID-19 symptoms even if the disease has not been confirmed. With the cases below, we highlight situations in which health care teams must decide how to apply visitor restrictions and whether, if ever, exceptions may be justifiable.

CASE 1

In the inner-city hospital during the peak of the COVID-19, pandemic personal protective equipment (PPE) supplies are low. Visitation has been restricted to compassionate reasons only. An 8-year-old boy with autism presents to the emergency department with severe stridor. Physicians decide

that he will need intubation. His parents are asked to wait outside during the intubation. Parents insist that if they stay to support him, he will be calmer, and the procedure will be safer for both the patient and the health care professionals. Should an exception be made to allow the parents to remain at the bedside, wearing PPE to prevent infection by viral droplet spread during the aerosolizing procedure?

CASE 2

A 2-week-old newborn, delivered at 32 weeks, is feeding extracted breast milk via a nasogastric tube. The mother develops mild upper respiratory congestion and does not want to self-isolate at home. She has not been tested for COVID-19. She asks to remain at her infant's bedside to provide her breast milk to her infant. Staff are concerned that she could be contagious to her newborn, to other NICU infants, and to the entire staff if she continues visitation.

CASE 3

A 14-year-old child with cerebral palsy develops respiratory distress and is admitted to the PICU. The results of

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a polymerase chain reaction test for COVID-19 are positive. The child is intubated, and her respiratory status worsens. Her prognosis for survival is guarded. The team has relaxed the one-parent visitation restrictions to allow both parents to be with her. Her grandparents have flown in from out of town, and the parents plead that they be allowed to visit.

Henry T. Puls, MD, Comments

These cases highlight the multifactorial nature of policy development and implementation as well as the diversity of scenarios and people that they stand to impact. Although analysis of specific scenarios will be beneficial, an accounting of pragmatic issues as they relate to stakeholders' professional duties and the application of an ethical framework may be most beneficial.

The ethical conflict surrounding visitor restrictions principally weighs 5 competing factors against each other: (1) hospitals' duty to ensure the safety of their staff, patients, and visitors; (2) hospitals' duty to provide excellent clinical care for all children; (3) legal guardians' (henceforth "parents") duty to provide for their children; (4) justice; and (5) autonomy. Any restrictions on visitors must consider these factors.

Hospitals have a duty to ensure the safety of their staff, patients, and visitors. Pragmatically, visitor restrictions function to better allow for social distancing. To date, social distancing measures have been the mainstay of our nation's public health response to COVID-19, for which masking, although beneficial, is not a replacement.¹ In addition, the apparent high rate at which people are infected with COVID-19 but remain asymptomatic must be considered. This makes visitor restrictions that are based solely on screening of symptoms an insufficient option. Unfortunately, neither the physical spaces of hospitals nor the

practicalities of delivering clinical care easily allow for social distancing. Said simply, the more visitors we allow, the more difficult social distancing becomes, and the harder it is for hospitals to fulfill their duty to ensure the safety of all persons within the hospital.

But there are trade-offs. In addition to infection control, pediatric hospitals have a duty to meet the standard of care for family-centered care and promote the psychological well-being of hospitalized children. Visitor restrictions may impede the pursuit of this goal. Children depend on parents for basic care, emotional support, communication, and surrogate decision-making, and parents have a duty to provide for their children. For these reasons, universally exempting all visitors, a practice currently common among adult hospitals, may be too severe for pediatric hospitals.²

As it pertains to justice, any policy restricting visitors for pediatric patients should be applied equally regardless of children's race, ethnicity, socioeconomic status, culture, and religion. Parents should understand that they are not alone in being required to limit their interactions with patients and forfeit their autonomy. Those burdens are shared by all. Parents may understand that restrictive visitation policies benefit their own child by limiting the number of people who might bring infectious diseases into the clinical setting. We must explain to parents that the policy applies to all families and to many health professionals who are required to work remotely. For both family members and professionals, we should promote "virtual" visitation options using video-based platforms.

With these considerations in mind, the following guidelines for visitor restrictions are ethically appropriate. First, hospitals should restrict visitation to parents only. Second, all

visitors should be screened for symptoms consistent with COVID-19. A positive screen result would disallow visitation rights until current medical science indicates that their contagion risk is back to that of the asymptomatic public. Third, for children hospitalized with suspected or confirmed COVID-19, visitation by asymptomatic parents should be allowed so long as PPE supplies permit their safe passage in and out of the hospital. These guidelines should be tailored to local factors such as hospitals' physical spaces, COVID-19 prevalence, and supplies of PPE. As review of these cases will demonstrate, additional a priori exemptions may be needed.

In case 1, the intubation procedure itself need not preclude the parents' bedside presence, which could benefit the patient, medical team, and parents.³ The important issue is the high risk for transmission of COVID-19 associated with intubation (approximately sixfold increased odds of transmission despite adequate PPE).⁴ Autonomous persons could choose to accept this risk, but to do so, and have an ongoing presence in the hospital, impairs the hospital's obligation to protect. A reasonable compromise may be for parents to remain for the sedation portion of the procedure but to then leave for the high-risk intubation. Conversely, parents might be allowed to stay for the intubation once informed of the risks to their health and agreement that they would be restricted from the hospital until either their son is ruled out of having COVID-19 or they have proven to not be infected themselves.

In case 2, this mother must be restricted from visitation until she has been quarantined at home for the duration recommended by public health authorities or until she can receive testing to rule out COVID-19. Her autonomy cannot infringe on others' safety and the hospital's duty to protect other persons. In addition,

although it is difficult to quantify the value of mother-infant interactions, the infant's physiologic care need not suffer for her absence. The medical team should explore safe avenues toward providing the mother's expressed breast milk.⁵ If concerns persist about the safe handling of her breast milk, the option of donor milk should be explored. It would also be ethically permissible to provide formula, although this should be a last resort.

Case 3 highlights a situation in which lifting visitor restrictions would principally aid the parents in meeting their perceived family obligations but would not benefit the physiologic outcomes for the child. If virtual options are not adequate in the family's estimation and assuming that (1) the grandmother screens negative for COVID-19, (2) the family's rituals do not increase staff's risk for COVID-19 (eg, child remains intubated during end-of-life care), and (3) the hospital can still fulfill its duty to protect all persons (eg, PPE are available), then visitation should be allowed. This scenario suggests that we should amend the above criteria to allow one additional nonparent visitor for end-of-life situations, either another family member or spiritual leader; if, and only if, the extra visitor presents no apparent undue burden on the hospital's duty to protect others from COVID-19.

COVID-19 and the public health responses necessary to slow its spread have profoundly disrupted American society and culture. The pandemic has led to loss of lives and livelihoods and to altered or banned religious practices and funeral proceedings. From a normative perspective, pediatric hospitals and their visitors should not be exempt from these same standards. A duty-based ethical framework for imposing visitor restrictions promotes equity and stakeholders' ability to meet their obligations in an ethical manner but

may lead to harms for individual children and their parents.²

Alice K. Virani, PhD, Holly Longstaff, PhD, and Ran D. Goldman, MD, Comment

During the COVID-19 pandemic, most hospitals have implemented severe restrictions on the number of individuals who can visit patients. The restrictions include allied health care providers as well as family members. The use of such mitigation strategies is known to be effective in reducing transmission of the disease.⁶ It also has likely immediate and long-term emotional and psychological risks for pediatric patients and their family members. Limited visitation undermines a desire to support family-centered care, which is believed to be both psychologically and medically beneficial.⁷ Using a careful ethical analysis, we can weigh the risks and benefits of such limitations and analyze when exceptions might be made and the restrictions lifted.

The first consideration is to determine if family members, who are often intimately involved in a child's physical and emotional care, are considered visitors or instead viewed as an integral part of the care team.⁸ This may differ depending on the setting as well as the underlying diagnosis, age, and cognitive capacity of a child. For all hospitalized children, however, parental presence contributes to the well-being of the child. This unique role requires thoughtful analysis to assess the ramifications of limiting their access to their child on a case-by-case basis.

There needs to be clear articulation of risks versus benefits of these restrictions to ensure that policies are proportional and reasonable. It is difficult to quantify the risks when testing is unavailable and nobody knows whether parental symptoms may represent COVID-19 or other viral illnesses. Both have risks, but the risks in actual cases of COVID-19

are much higher than those of other illnesses, particularly to vulnerable populations, including children with existing comorbidities for whom infection may be severe.^{9,10} Examination of local epidemiological data to understand community spread and risk is crucial. However, this is complicated by the emerging nature of the new viral illness and accurate community spread modeling.

In addition to such macro data about public health, policies need to consider the risks of specific procedures. Aerosolizing procedures are posing the highest risk, but, with proper PPE, the exact risk of transmission is low.

These risks of contagion must be measured against the equally uncertain emotional and psychological risks to both the child and their family caused by visitation restrictions. We know that children need their parents during times of severe illness. We do not know what the risks of restriction of parental presence will be.^{11,12} These calculations are complicated by the uncertain efficacy of and inequitable access to technology such as video conferencing that may be offered and used to the extent possible.

Once these risks have been clearly articulated and quantified, attention needs to turn to mitigation for current and future patients, families, health care providers, and the broader public. PPE shortages complicate these calculations because such shortages make it necessary to conserve PPE for future situations in which frontline health care providers might be at risk. Once PPE supplies are replenished and available for family members and providers, this threat may be satisfactorily mitigated, and visitation restrictions should be lifted.

Consideration should also be given to whether it would be permissible to allow parents to "room in," with

restricted movement outside the hospital room. If they do, they would not need PPE and would not be likely to present a contagion risk to other patients or health professionals. Mechanisms to enable this will need to be explored depending on the context and may include, for example, ensuring access to food for parents as well as the actual patient.

In the case of the 8-year-old boy with autism, allowing one parent to stay with the child until he is sedated and using video of the procedure to an adjoining room may be the best solution. In the case of the breastfeeding newborn, testing the mother for COVID-19 may enable agreement on mutually acceptable resolution such as making arrangements for the mother to stay in the infant's room if they are both positive or both negative for COVID-19. In the 14-year-old child positive for COVID-19 with cerebral palsy, facilitation of virtual connection to grandparents may be appropriate. This would allow the child to connect while protecting the elderly grandparents from their known elevated risk for severe complications from the disease.⁷

As PPE availability and distribution improves, population-based testing levels increase, and knowledge regarding pediatric transmission of COVID-19 advances, decision-makers need to ensure ongoing reevaluation of their hospital's visitation strategies. This iterative and transparent adjustment of policies needs to safeguard both physiologic and psychological risks and benefits to ensure they are proportional and empirically based. Individualized decisions about visitation are warranted when unique circumstances arise. Such individualized decisions should consider family structure and cultural factors. Humane policies will allow exceptions when warranted, as long as those exceptions are used consistently. Compassionate

communication with families and health care teams is essential so that families understand the reasons for the restrictions and health care professionals are not left alone "holding the bag" and suspected of a lack of empathy or compassion.

Rebecca Mitsos, CCLS, Comments

A vast throng of issues arises from visitor restriction policies. Such policies are always developed for utilitarian reasons that sacrifice some benefits for individual patients and families to maximize benefits for the community. The community benefit accrues because such policies limit the spread of infection. During the COVID-19 pandemic, such policies also allow the conservation of scarce PPE. But they impose burdens on parents and may be psychologically detrimental for individual patients.

The collectivist characteristics of these policies conflict with individual and individualistic bedside needs. Hospitalized children need their parents for both emotional support and for safety and advocacy. In noncrisis situations, this basic need is usually easy to meet. But in a worldwide pandemic, resources are strained. There is not enough staff time or PPE or other means of infection control. The consequences of this are predictable in the physical sense but demand further consideration in the psychosocial sense.

The sequelae of visitor restriction policies do not fall only on the patient and family. Staff are affected, too. It is easy to overlook or devalue the needs of staff by not adequately supporting their mental health needs. The pandemic creates increased demands on their regular responsibilities. Visitor restriction policies require them to also deal with and try to mitigate the psychosocial impact of a stressful hospital experience of their patients and their families. It is not realistic to assume that staff have the resilience and the emotional

bandwidth, psychological resources, and communicative skills to address children's and families' specific needs that result from visitor restrictions without support that is intentional and specific to psychosocial needs. As a result, the stressed become further stressed and the awareness of the psychosocial impact may fall off the collective radar. This can cause even further strain to the individual experience of the patient, family, and staff members involved.

There is no one right answer to the dilemmas raised by these cases. But, at a minimum, they need to be recognized as dilemmas so that psychosocially based, trauma-trained clinicians can be enlisted to help all parties involved: patients, their families, and the staff. Social workers, chaplains, child life specialists, and psychologists all have something to contribute and may analyze each case differently.

An emergency department is a psychologically overwhelming environment for anyone, especially for an 8-year-old child with autism. There is no reason to doubt that the parents' insistence that their presence would help their child remain calmer is true. Having his caregiver at the bedside is a compassionate reason to override the general rule about visitors at the bedside. That is especially true in this case because, if the patient is in fact positive for COVID-19, the parents have already likely been exposed. In this situation, it would be sensible and equitable to allow one parent at the bedside for patient comfort and safety and have the other step out to minimize unnecessary exposure and PPE use. If there were time and resources available to sedate the boy first, then the parents could stay until he was sedated and then step out of the room to completely avoid the risk of any viral droplet spread during the intubation. These extra few minutes spent in coordination, advocacy, and physical arrangement have the

potential to significantly reduce the impact of a traumatizing medical experience for all involved.

The second and third cases present perfect opportunities for compassionately executed psychosocial care. In both cases, there are a few critically important tools needed to build the bridge for these families. First, there must be time set aside for clear, patient, and empathic conversation to help parents understand the reasons for restrictive policies. There is an ethical imperative for staff to be focused on setting boundaries in these conversations. Boundary setting can and should be done with compassion and careful consideration of the individual circumstances. This can mean making space and time for families to express themselves emotionally and having the appropriate psychosocial care staff available to help support the transition through difficult conversations. After the boundaries have been set, the second tool and the next ethical imperative is to braid in psychosocial care considerations with the rest of the necessary health care.

The restricted contact between the 32-week-old infant and the mother is not ideal for a variety of developmental reasons. Skin-to-skin contact is best for the mother and infant even if, as in this case, it does not take place during breastfeeding because the infant is being fed through a nasogastric tube. It would be understandably difficult to know another caregiver would be providing this care in her place, but thoughtful partnership between the mother and staff could help soothe some of those concerns regarding the infant's developmental needs. If the mother is positive for COVID-19, there is an extremely high risk of endangering all whom she encounters. That risk ethically outweighs the impact that her presence at the bedside has for her child. Ideally, a rapid test to

determine if the mother is infected would clarify the issues. Additionally, conversations should be facilitated regarding the potential presence of another caregiver being available. Staff can work on therapeutic bonding modalities that do not require the mother being at the bedside. Examples include partnering with the mother in creating a bedside care plan that would remain posted in the infant's room or on the door, thoughtfully and specifically planning what to have nearby to continue work on developmental milestones for the infant, carefully implementing routines set by the mother that are familiar to the infant, and providing clear information regarding how and when the mother can or should expect updates from the staff. These modalities facilitate opportunities for the mother to feel connected, informed, and in control of her infant's care.

In the third case, there is a significant risk of 2 elderly people being within a hospital setting and at the bedside of their grandchild who is positive for COVID-19. The risks that accompany COVID-19 will more than likely outweigh the potential benefits of their physical presence, although this may be difficult for the family to process at a time of such significant stress as the end of a child's life. This must be explained to them, followed by family-led discussion about the rituals that might help them deal with their grief. Inclusion of a faith-based leader's support in these discussions may also help support the family's grief and support cultural respect and consideration. Modifying rituals and implementing telehealth can allow the grandparents to be "present" without further risking their own health and well-being or that of anyone else on the unit.

Infection control policies are critically important, but it is ethically imperative for these policies to be devised with increased considerations for psychosocial care.

This means an occasional, carefully executed call for flexibility is necessary. Of course, patient safety should always remain paramount. But it is possible for patient safety to remain paramount with the inclusion of addressing the ever-changing psychosocial needs of patients and their caregivers. This will also alleviate the pressure on staff and address potentially traumatic health care experiences for patients. The exigencies of caring for patients during this pandemic lead to enormous stress on parents and professionals. Experts in psychosocial care can help.

John D. Lantos, MD, Comments

The COVID-19 pandemic has led to situations in which health care professionals and institutions must compromise values that, in other circumstances, seem primary and essential. We are all committed to family-centered care. We all see parents as essential partners in the care of their children. We recognize that parental presence is both psychologically beneficial and good for the quality and safety of the medical care that we provide. Given all those commitments, it is painful to develop and enforce policies that violate our deeply held values. However, in a pandemic, the balance of risks and benefits shifts. The challenge is to carefully balance the harms of restricting visitation with the benefits of protecting other patients, families, and health professionals. Evidence-based policies are essential. Compassion-based exceptions are also sometimes appropriate.

ABBREVIATIONS

COVID-19: coronavirus disease
2019
PPE: personal protective
equipment

REFERENCES

1. Centers for Disease Control and Prevention. Coronavirus disease 2019 (COVID-19): social distancing: what is social distancing? 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>. Accessed April 28, 2020
2. Hafner K. 'A heart-wrenching thing': hospital bans on visits devastate families. *The New York Times*. March 29, 2020. Available at: <https://www.nytimes.com/2020/03/29/health/coronavirus-hospital-visit-ban.html>. Accessed April 28, 2020
3. Dingeman R, Mitchell E, Meyer E, Curley M. Parent presence during complex invasive procedures and cardiopulmonary resuscitation: a systematic review of the literature. *Pediatrics*. 2007;120(4):842–854
4. Matava C, Kovatsis P, Summers J, et al; PeDI-Collaborative. Pediatric airway management in COVID-19 patients - consensus guidelines from the Society for Pediatric Anesthesia's Pediatric Difficult Intubation Collaborative and the Canadian Pediatric Anesthesia Society [published online ahead of print April 13, 2020]. *Anesth Analg*. doi: 10.1213/ANE.0000000000004872
5. Human Milk Banking Association of North America. Milk banking and COVID-19. 2020. Available at: https://www.hmbana.org/file_download/inline/a04ca2a1-b32a-4c2e-9375-44b37270cfbd. Accessed April 25, 2020
6. World Health Organization. Coronavirus disease 2019 (COVID-19): situation report – 91. Available at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200420-sitrep-91-covid-19.pdf?sfvrsn=fcf0670b_4. Accessed April 25, 2020
7. Banach D, Bearman G, Morgan D, Munoz-Price L. Infection control precautions for visitors to healthcare facilities. *Expert Rev Anti Infect Ther*. 2015;13(9):1047–1050
8. Meert K, Clark J, Eggly S. Family-centered care in the pediatric intensive care unit. *Pediatr Clin North Am*. 2013; 60(3):761–772
9. Hutchfield K. Family-centred care: a concept analysis. *J Adv Nurs*. 1999; 29(5):1178–1187
10. Murthy S, Gomersall C, Fowler R. Care for critically ill patients with COVID-19. *JAMA*. 2020;323(15):1499–1500
11. Dong Y, Mo X, Hu Y, et al. Epidemiology of COVID-19 among children in China. *Pediatrics*. 2020;145(6):e20200702
12. Hart J, Turnbull A, Oppenheim I, Courtright K. Family-centered care during the COVID-19 era [published online ahead of print April 22, 2020]. *J Pain Symptom Manage*. doi:10.1016/j.jpainsymman.2020.04.017

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