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Intensive care unit visiting and family communication during the COVID-19 pandemic: A UK survey

Adam J Boulton[1,2], Helen Jordan[3], Claire E Adams[3], Petra Polgarova[4], TRIC Network (Corporate Author), WMTRAIN (Corporate Author), Andrew Conway Morris[4,5] and Nitin Arora[1]

Abstract

Background: Frequent visiting and communication with patients' families are embedded within normal ICU practice, however the COVID-19 pandemic has challenged this, and it is unclear how ICUs are managing. We aimed to investigate how NHS ICUs are approaching family communications and visiting during the COVID-19 pandemic.

Methods: An electronic snapshot survey was delivered between 16th April and 4th May 2020 and was open to NHS ICUs. Replies from 134 individual ICUs with COVID patients were included.

Results: All reported that visiting was more restricted than normal with 29 (22%) not allowing any visitors, 71 (53%) allowing visitors at the end of a patient's life (EOL) only, and 30 (22%) allowing visitors for vulnerable patients or EOL. Nearly all (n = 130, 97%) were updating families daily, with most initiating the update (n = 120, 92%). Daily telephone calls were routinely made by the medical (n = 75, 55%) or nursing team (n = 50, 37%). Video calling was used by 63 (47%), and 39 (29%) ICUs had developed a dedicated family communication team. Resuscitation and EOL discussions were most frequently via telephone (n = 129, 96%), with 24 (18%) having used video calling, and 15 (11%) reporting discussions had occurred in person. Clinicians expressed their dissatisfaction with the situation and raised concerns about the detrimental effect on patients, families, and staff.

Conclusions: COVID-19 has resulted in significant changes across NHS ICUs in how they interact with families. Many units are adapting and moving toward distant and technology-assisted communication. Despite innovative solutions, challenges remain and there may be a role for local and national guidance.

Keywords

Critical care, intensive care, communication, COVID-19

Introduction

The COVID-19 pandemic has placed significant demand upon intensive care units (ICUs) across the NHS.[1] Dilution and stretching of professional resources has challenged ICUs to continue to deliver high quality direct clinical care.[2] Frequent communication with a patient's next of kin and family is a regular and vital part of normal ICU care.[3,4] Typically, family are informed when their relative is admitted to ICU and receive regular updates thereafter, particularly if there is clinical deterioration.[4] This regular communication is being challenged by the high volume of patients being cared for and infection control considerations. Most families will frequently visit their next of kin in ICU and witness them undergoing intensive care therapies, such as invasive ventilation.[5,6] It is an extremely stressful and worrying time for a family when their relative is critically ill and being cared for within an ICU. Visiting their relative and regularly communicating with the ICU medical and nursing teams is a priority for many families and crucial to coping with such a difficult situation.[5,6] Family members

[1]Academic Department of Anaesthesia, Critical Care, Pain and Resuscitation, Heartlands Hospital, University Hospital Birmingham NHS Foundation Trust, Birmingham, UK
[2]Warwick Medical School, University of Warwick, Coventry, UK
[3]Intensive Care Unit, Royal Infirmary of Edinburgh, Edinburgh, UK
[4]Division of Anaesthesia, Department of Medicine, University of Cambridge, Cambridge, UK
[5]John V Farman Intensive Care Unit, Addenbrooke's Hospital, Cambridge, UK

Corresponding author:
Nitin Arora, Academic Department of Anaesthesia, Critical Care, Pain and Resuscitation, Heartlands Hospital, University Hospital Birmingham NHS Foundation Trust, Birmingham, UK.
Email: draroranitin@gmail.com

physically seeing their next of kin may help them to understand how critically ill their relative is and the invasive nature of intensive care. Visiting relatives at the end of life is fundamental within many cultures and is a crucial part of the grieving process for the bereaved.[7]

Restrictions to hospital visiting policies during the COVID-19 pandemic have left families unable to visit their next of kin in ICU and receive face-to-face updates from the clinical team.[2,8,9] This may be creating additional stresses and difficulties for families and ICU teams. Anecdotally, some ICU teams are communicating with families during the COVID-19 pandemic by telephone updates, dedicated family communication teams, and video calling.[2,10,11] Additionally, visiting during end of life care has also been affected and there have been reports of families being unable to visit their relatives.[12] Given the intensified clinical care demands, infection control considerations, and the importance of relative visiting and communication with ICU teams, it is of interest what the visiting practices of ICUs are during the COVID-19 pandemic and how ICU teams are communicating with patient families. We aimed to investigate how UK ICUs are approaching family communications and visiting during the COVID-19 pandemic.

Methods

This snapshot survey was delivered between 16th April and 24th May 2020 and was open to all UK ICUs. A questionnaire was designed by a team of intensive care clinicians from across the UK (Supplementary File 1). Questions addressed visiting practices prior to and during the COVID-19 pandemic, regular communication with families, and communication with families regarding resuscitation decisions and at the end of life. The questionnaire used multi-choice, checkbox and free-text questions, and was piloted at ICUs in the West Midlands with the support of the WMTRAIN trainee network. There was a 100% response rate from West Midlands hospitals and after iterative development, the final web-based survey was distributed nationally via the Trainee Research in Intensive Care (TRIC) Network. It was completed by individual clinicians regarding practices of the ICU within which they were working.

Where two or more replies were received from a single unit they were combined, and any discrepancies resolved by contacting the individual ICU. Replies were compiled and quantitatively analysed using Microsoft Excel to produce descriptive statistics. Free-text responses were reviewed for emergent themes and summarised with illustrative quotes drawn out.

Results

A total of 199 replies were received and after duplicates were merged there were 135 NHS ICUs for analysis. Replies were received from all critical care network regions of the UK. Only one ICU reported they had no COVID patients and was therefore excluded from analysis.

Visiting times

Twenty nine (22%) units reported that no family visiting was allowed during the COVID-19 pandemic, 71 (53%) reported visiting was allowed only for patients at the end of life and 30 (22%) reported visiting was allowed for vulnerable patients or those at the end of life. All units reported that visiting was more restricted than in normal times. Fifty seven (42%) units reported that in normal times visiting was allowed for at least 12 hours per day and just 28 (21%) reported visiting in normal times was for less than 6 hours per day. A majority of units reported that in normal times open visiting was permitted for vulnerable patients or those the end of life, in addition to specified visiting times.

This was corroborated by free-text responses indicating that visiting was considerably more restricted than normal with most units not allowing visiting, except for vulnerable patients or those at the end of life. In end of life circumstances, many units reported limiting visiting duration to 15 minutes and/or limiting the number of visitors to one or two only. There was a theme relating to assessment and acknowledgement of risk. This included counselling visitors and supporting informed visitor decision making, use of personal protective equipment (PPE), and advice to self-isolate for 14 days afterwards.

> No visitors unless end of life then we get NOK in full PPE after signing acceptance of risk form.

Some units reported a flexible approach by allowing visiting for certain patients at the discretion of the consultant and nurse in charge, whilst one reported allowing visiting for families of healthcare workers. There appeared concern regarding availability of PPE with one unit allowing relatives to visit if already fit tested and able to bring their own mask.

Units reported concern over the lack of family visiting and the effect this was having on patients and staff.

> We have found non-visiting to be very detrimental to patients' psychological wellbeing. We have found a significant amount of patients post ICU have believed their relationships have finished.

> It has been very difficult (psychologically and for clear communication) for patients, relatives and staff not to have face to face interaction.

Family communication

Nearly all ICUs (n = 130, 97%) were updating families daily during COVID-19. Participants reported the methods their unit was using to communicate with families, revealing that most ICUs were initiating the family update (n = 120, 92%). Daily phone calls were routinely initiated by the medical team in 75 (55%) ICUs and by the nursing team in 50 (37%) ICUs. Thirty nine (29%) units had developed a dedicated team for regular family updates.

Many units developed communication teams and were innovative in their creation. They utilised a wide variety of personnel, typically those with a clinical background. This was commonly critical care nurses shielding from clinical duties, doctors from other specialities (including ophthalmology, oncology, cardiothoracics), retired anaesthetists/intensivists, and medical students. There were also reports of operating department practitioners, organ donation nurses, general practitioners, and Macmillan cancer support nurses being included in communication teams. Some units reported initially using administrative staff following scripts but received poor feedback from families and moved to using clinical staff. Units frequently identified that communication teams initiated a brief or specifically structured daily update, with senior nurses or ICU consultants used for more complex communication on an *ad hoc* basis. Positive factors regarding communication teams included the value of continuity and the ability to protect busy front-line staff.

> This works a lot better than random nurses giving a bit of info who are only on shift that day. Really good for continuity and building rapport with families.

Participants also reported their dissatisfaction with telephone communication and its challenges.

> Difficult to communicate over telephone where the relatives hang on to each word resulting in confusion, anxiety and anger.

> This has been a really challenging time for our team as these are such difficult conversations to have by phone. However the families have generally been very grateful that we've contacted them daily.

Not all units established communication teams, with some reporting inability to dedicate staff to communication. One unit reported organising visits or discussions outside the bedside window and set up marquees outside to provide more privacy.

Many ICUs were using modern technology to support family communication, with video calling being used by 63 (47%) units and five reporting use of vCreate software to facilitate this. Free-text responses indicated that video calling was also used to provide communication between awake patients and families, typically utilising tablets and video calling applications such as WhatsApp and FaceTime. In some units this was with dedicated unit devices, whilst in the others they used patients' mobile phones supported by ICU clinical staff.

> Video calling used frequently for families to chat to patients who are able.

> We have recently acquired some iPads to facilitate video calling with relatives during the patient's admission.

End of life and do not resuscitate family discussions

Do not attempt resuscitation and end of life family discussions were commonly done by consultants (n = 132, 99%), followed by registrars (PGY 4-7) (n = 60, 45%). Six (4%) units reported that senior house officers (PGY 1-3) may conduct these discussions. These discussions were most frequently phone calls initiated by the ICU medical team (n = 129, 96%). Video calling was reported by 24 (18%), and 15 (11%) reported that these discussions may occur in person.

Many free-text responses reported the particularly challenging nature of having these discussions over telephone and described their displeasure with the situation.

> End of life discussions over the phone seem horribly unfair. It is difficult for families. And for staff.

> The practice we have [set] up with, whilst a good compromise, still feels woefully short of our normal practice.

Discussion

COVID-19 has led to major changes in the way that ICUs interact with patients' families, with significant restrictions on visiting and a shift towards ICU-initiated distant communication rather than face-to-face consultations. Our survey found that, compared to the pre-COVID period, visiting was heavily restricted, being either completely halted or restricted to end of life care. Although the responses to this have varied between units, common themes emerge. Units distinguish between routine communication, which may be delivered by a range of staff including those without an ICU background, and critical communication concerning limitations of care and end of life decisions. These latter issues are overwhelmingly delivered by experienced ICU-specialist medical and nursing staff. Modern technology has been utilised to deliver video calling to many ICUs, ranging from dedicated ICU-provided devices to ad-hoc use of patient telephones. Despite innovative solutions, the

situation has remained challenging and many clinicians expressed their dissatisfaction with the service they were able to deliver for patients, families, and staff alike.

The negative impact of visiting restrictions on patients and their families remains unmeasured but is likely to be significant and requires urgent study. Relative visiting and family discussions are important to patients and families, in addition to clinical staff,[5,6] and it appears NHS ICUs have taken steps to facilitate this during a difficult period. The range of staff used for communication may reflect local resources, however the experience of using non-clinical staff did not appear successful. Defining the optimal skill set of a remote communication team, with tiered communication responses from routine to critical, may help manage future restrictions on visiting.

As the pandemic develops and knowledge around the risk to visitors and patients grows, there will be opportunities to revise and refine communication and visiting strategies. To what extent long term psychological sequelae may arise from the strategies adopted, for both families and NHS staff, remains uncertain. The responses to our survey suggest psychological distress amongst NHS staff has been enhanced by distant communication, and the potential harms will have to be weighed against risks of viral transmission. ICU communication and visiting occur within the wider societal context, and the impact of a nationwide 'lockdown' was the context in which this survey was conducted. It remains to be seen how this will differ as we move into a period of more localised disease control solutions.

In summary, our survey shows that the first wave of the COVID-19 pandemic led to widespread changes across UK ICUs in the way that interactions with families were handled. There may be a role for local and national guidance as we prepare for future outbreaks and pressures.

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ORCID iDs

Adam J Boulton https://orcid.org/0000-0002-2115-1129
Nitin Arora https://orcid.org/0000-0001-9941-8340

Supplemental material

Supplementary material for this article is available online.

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