ELECTRONIC SUPPLEMENTARY MATERIAL

Fiest KM *et al.*: Impact of restricted visitation policies during COVID-19 on critically ill adults, their families, critical care clinicians, and decision-makers: a qualitative interview study

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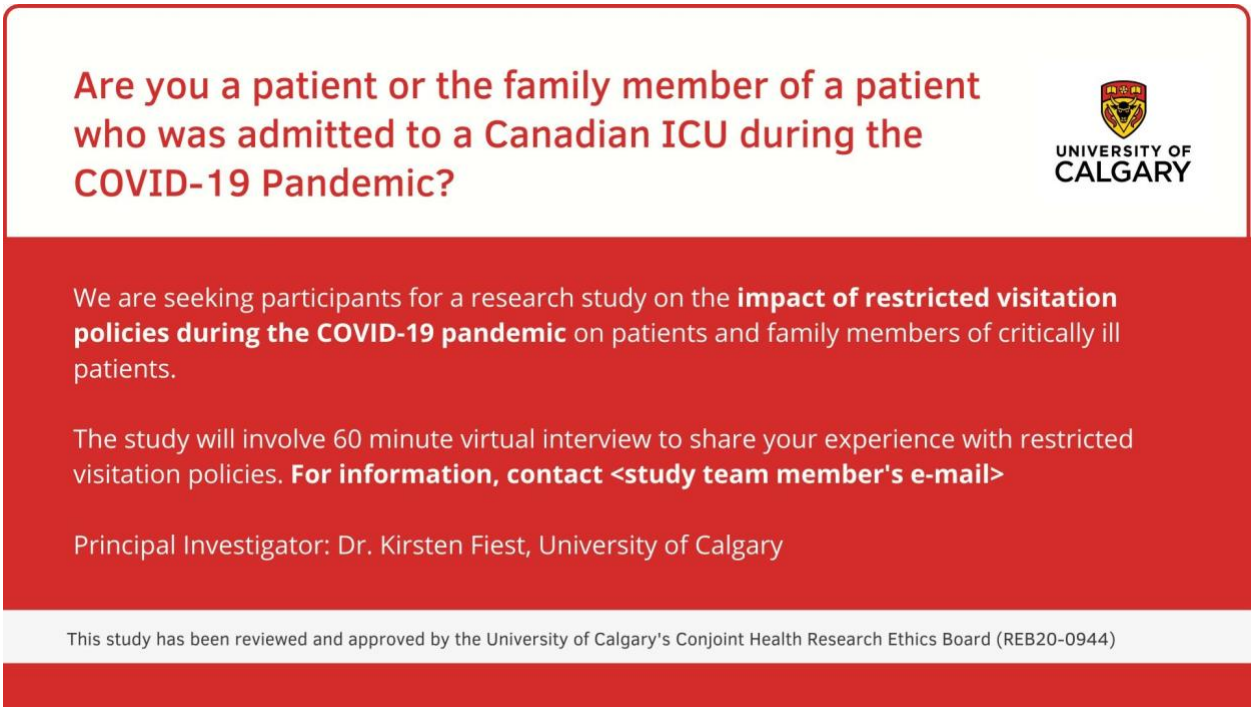
eAppendix 1 Social media recruitment materials

Understanding and managing the effects of COVID-19 restricted visitation policies – Interview Tweet

ICU Families:

Are you a patient or the family member of a patient who was admitted to the ICU during the #COVID19 pandemic? We are seeking participants for a research study on the impact of restricted visitation policies on ICU patients and their family members during the COVID-19 pandemic. If you are interested in participating, more information is provided here: [enter survey link]



Survey link contents:

Study information:

During COVID-19, many hospitals around Canada developed visiting rules to prevent the spread of coronavirus and save masks, gowns, and gloves. Some visiting rules did not allow any family members to visit a patient in the Intensive Care Unit (ICU). We want to know how hard it was for patients and families when these visiting rules were in place.

Patients or family members who are interested will be asked to participate in a virtual 60-minute interview (Microsoft Teams, Zoom, phone, Skype) to speak about:

1. Their experience with these visiting rules during the COVID-19 pandemic
2. What could have made these visiting rules easier

This information will help us understand the personal impacts of restricted visitation policies and how hospitals can help.

If you are interested in participating, please complete this form and we will contact you by e-mail to schedule an interview at a time that works best with your schedule.

Are you a family member of a patient admitted to an ICU during the COVID-19 pandemic? (Yes/No)

Are you a patient admitted to an ICU during the COVID-19 pandemic? (Yes/No)

Are you 18 years of age or older? (Yes/No)

Was the patient in an ICU in a Canadian Hospital? (Yes/No)

Please provide the following information:

First Name:

Last Name:

E-mail:

eAppendix 2 Patient and family member interview guide

Understanding and managing the effects of COVID-19 restricted visitation policies – ICU Patient/Family Member Semi-Structured Interview

Introduction

Thank you for agreeing to speak with us today about how restricted visitation policies have impacted [ICU] patients or family members of [ICU] patients. We are conducting interviews with [ICU] patients and family members of [ICU] patients across Canada. We look forward to the opportunity to learn from your experiences. **These topics serve as a guide only**. If there are other insights you would like to offer, we would like to hear them.

We emailed you a copy of the informed consent form. The consent form is part of the process of informed consent. It should give you a basic idea of what the research is about and what your participation will involve.

Did you receive the consent form and have a chance to read through it? Good.

Because it is important that you understand your rights as a participant, I just want to review the main elements in the consent form:

[Interviewer will read the REB approved Oral Consent Script if family member did not review the consent form that was sent before the interview]

Before we start the discussion, I would like to remind you that we will be recording this interview in order for us to accurately capture our discussion. Do you agree to be recorded for research purposes?

<If they agree, start recording>

Can you please verbally state that they consent to participate in this study?

Thank you for joining us. When the COVID-19 spread happened in Canada, hospitals wanted to stop the spread of COVID-19 and save personal protective equipment (PPE) like masks and gloves, and hospital gowns. To do this, many hospitals developed visiting rules to limit family members visiting a patient in the Intensive Care Unit. [alternative: many jurisdictions created visiting rules to limit family members from visiting a resident of a care facility/patient in a hospital]. Today we will be talking about your experiences with these restricted visitation policies during COVID-19. Your experiences will help us describe and understand how changes to visitation policies have impacted the mental health and experiences of patients and family members. The findings from this research will help inform recommendations for visitation policies across Canada .

Semi-structured interview questions
Discussion points: knowledge, experiences, perceptions, behaviors, underlying drivers, and implications

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Topic 1: COVID-19 restricted visitation policies

1. Can you please describe your experience with a COVID-19 restricted visitation policy?
    a. What was the visitation policy?
        i. Probe: [If there are exceptions] How did you decide who comes in or not?
        ii. Probe: Do you think the visitation policy was appropriate?
    b. How did you communicate with the [ICU care team/your family]?
        i. Probe: How do you think this communication would have differed without restricted visitation policies (i.e., if you could visit in-person)?
    c. What was difficult? What made it easier?

Now I would like you to think about how COVID-19 restricted visitation policies affected your life. Can you begin by telling me about…

2. We are going to talk now about how COVID-19 restricted visitation policies affected your life?
    a. How did these visitation policies impact your home?
    b. How did these visitation policies impact you?
    c. How did these visitation policies impact your family?
    d. Did these visitation policies have other impacts?

3. What could have made these restricted visitation policies easier?
    a. For families?
    b. For patients?
    c. Others?
    d. What would have made communication easier?
        a. Probe: any resources you would have liked to offer or wish you had access to?
    e. How could have hospitals supported families/patients?

4. What are some of the strategies you used to deal with these restricted visitation policies?
    a. What worked well?
    b. What did not work well?
    c. What suggestions do you have for future visitation policies for future pandemics or for times when visiting is not possible?

Do you have any final thoughts?

Thank you for participating in our COVID-19 study.

<turn off recorder>

Structured Demographic Questions (asked individually)

We are collecting personal and family demographic information in order to describe our participants in aggregate. Contact information is only for us if you would like to review the report generated from this work to ensure that it reflects your experiences. Please note that your demographic information and contact info will be stored in a password protected database that is only accessible to the study research team. If you are not comfortable answering any of the below questions you are welcome to skip any or all of those you do not wish to answer.

If applicable: What email address/mailing address do you wish to receive your transcript?

_____

1. What is your date of birth (YYYMMDD)?

[verification: YYYMMDD]

2. What is the sex you were assigned at birth?

O Male
O Female
O Prefer not to answer

3. What is your gender identity?

☐ Man
☐ Woman
☐ Non-binary
☐ Two-spirit
☐ Prefer to self-describe: _____
☐ Prefer not to answer

Two-spirit is a cultural term used by some Indigenous people to mean a person who has both a male and female spirit.

4. Please indicate your <u>ethnic or cultural group</u> (select all that apply).
Please note that the examples provided are non-exhaustive and are meant to be a guide to help you respond to the question.

☐ First Nations
☐ Inuit
☐ Métis
☐ Other North American Origins (e.g. Canadian, American, Acadian)
☐ British Isles Origins (e.g. English, Irish, Scottish)
☐ Western European Origins (e.g. French, German, Dutch)
☐ Northern European Origins (e.g. Swedish, Finnish, Icelandic)
☐ Eastern European Origins (e.g. Russian, Latvian, Hungarian)
☐ Southern European Origins (e.g. Albanian, Italian, Spanish)

☐ Caribbean Origins (e.g. Cuban, Dominican, Bahamian)
☐ Latin, Central, and South American Origins (e.g. Brazilian, Mexican, Venezuelan)
☐ Central and West African Origins (e.g. Cameroonian, Nigerian, Sierra Leonean)
☐ North African Origins (e.g. Egyptian, Moroccan, Sudanese)
☐ South and East African Origins (e.g. Ethiopian, Rwandan, Zimbabwean)
☐ West Central Asian and Middle Eastern Origins (e.g. Afgan, Iranian, Palestinian)
☐ South Asian Origins (e.g. Bangladeshi, Pakistani, Punjabi)
☐ East and Southeast Asian Origins (e.g. Chinese, Japanese, Vietnamese)
☐ Ocean and Pacific Islands Origins (e.g. Australia, Fijian, Polynesian)
☐ Prefer not to answer
☐ Other**:** _____

5. What language do you speak <u>most often</u> at home?

O English
O French
O Mandarin
O Cantonese
O Punjabi
O Spanish
O Arabic
O Other (please specify): _____
O Prefer not to answer

6. What is your employment status?

O Employed, working 40 or more hours per week
O Employed, working 1-39 hours per week
O Not employed, looking for work
O Not employed, NOT looking for work
O Retired
O Disabled, not able to work
O Other (please specify): _____
O Prefer not to answer

7.What is your place of residence?

O Alberta, City (please specify): _____
O British Columbia, City (please specify): _____
O Manitoba, City (please specify): _____
O Saskatchewan, City (please specify): _____
O Ontario, City (please specify): _____
O Other (please specify): _____

8. [Family] What is your relationship to your loved one who was recently discharged from the ICU?

O I am their spouse (including common-law)

O I am their parent
O I am their child
O I am their grandchild
O I am a close friend
O Other (please specify): _____
O Prefer not to answer

eAppendix 3 Healthcare provider interview guide

Understanding and managing the effects of COVID-19 restricted visitation policies – ICU Healthcare Provider Semi-Structured Interview

Introduction

Thank you for agreeing to participate in today's discussion about how restricted visitation policies have impacted healthcare providers of critically ill patients. We are conducting interviews with healthcare providers of critically ill patients across Canada. We look forward to the opportunity to learn from your experiences. **These topics serve as a guide only**. If there are other insights you would like to offer, we would like to hear them.

We emailed you a copy of the informed consent form. The consent form is part of the process of informed consent. It should give you a basic idea of what the research is about and what your participation will involve.

Did you receive the consent form and have a chance to read through it? Good.

Because it is important that you understand your rights as a participant, I just want to review the main elements in the consent form:

[Interviewer will read the REB approved Oral Consent Script if healthcare provider did not review the consent form that was sent before the interview]

Before we start the discussion, I would like to remind you that we will be recording this discussion in order for us to accurately capture our discussion. Do you agree to be recorded for research purposes?

<If participant agrees, start recording>

Can you please verbally state that you consent to participate in this study?

Thank you for joining me. When the COVID-19 spread happened in Canada, hospitals wanted to stop the spread of COVID-19 and save personal protective equipment (PPE) like masks and gloves, and hospital gowns. To do this, many hospitals enacted restricted visitation policies to limit family members visiting a patient in the Intensive Care Unit. Today we will be discussing your experiences with these restricted visitation policies during COVID-19. Your experiences will help us describe and understand how changes to visitation policies have impacted the mental health and experiences of healthcare providers. The findings from this research will help inform recommendations for visitation policies across Canada

Semi-structured interview questions

Discussion points: knowledge, experiences, perceptions, behaviors, underlying drivers, and implications

Topic 1: COVID-19 restricted visitation policies

5. We will begin with your experience with COVID-19 restricted visitation policies?
    a. What was the COVID-19 restricted visitation policy in the ICU where you work?
        i. Probe: How is this different from the visitation policy before COVID-19?
        ii. Probe: How did it change during the pandemic?
        iii. Probe: How was the visitation policy communicated? (to you/to the families)
        iv. Probe: Do you think the visitation policy was appropriate?
        v. Probe: Did the ICU abide by the policy?

    b. During restricted visitation, how did you communicate with the family?
        i. Probe: Was this different that your normal mode of communication with family members?
        ii. What worked well for communication?
        iii. What would have made communication easier?
            - Probe: any resources you would have liked to offer or wish you had access to?

6. We are going to talk now about the ways in which COVID-19 restricted visitation policies affected your life.
    a. How did these visitation policies impact your work?
        i. Probe: How did it affect patient care (frequency, duration)?
        ii. Probe: How did it impact your workflow or the workflow of others?
        iii. Probe: How did it affect communication time with family members?
        iv. Probe: In which ways did it affect difficult conversations (over phone)
    b. How did these visitation policies impact you on a personal level?
        i. Probe: Did your sleep pattern change?
        ii. Probe: Did your routine after work or on days off change?
        iii. (if relevant) For yourself, or your colleagues, what types of support did you seek while caring for a patient (or after a patient's death)?
    c. How did it impact your patients and their family?

7. What could have made these restricted visitation policies easier?
    a. For healthcare providers?
    b. For patients and their families?
    c. Others?
    d. How could have hospitals better supported healthcare providers?
    e. What suggestions do you have for future visitation policies for future pandemics or for times when visiting is not possible?
        i. Probe: What are the key elements to include in a visitation policy?

ii. Probe: What would be the key facilitators and barriers to implementing a restricted visitation policy?

8. Closing questions:
    a. We still haven't heard very much about (insert topic that hasn't yet been raised). Do you have any thoughts about this?
    b. Thank you for providing your insight on restricted visitation policies. Do you have any final thoughts?

<turn off recorder>

Structured Demographic Questions

We are collecting personal and family demographic information in order to describe our participants in aggregate. Contact information is only for us if you would like to review the report generated from this work to ensure that it reflects your experiences. Please note that your demographic information and contact info will be stored in a password protected database that is only accessible to the study research team. If you are not comfortable answering any of the below questions you are welcome to skip any or all of those you do not wish to answer.

If applicable: What email address/mailing address do you wish to receive your transcript?

_____

Demographics questions:

1. **What is your age group?**
    - **O** <20 years
    - **O** 20-29 years
    - **O** 30-39 years
    - **O** 40-49 years
    - **O** 50-59 years
    - **O** ≥60 years
2. **What is your sex?**
    - **O** Male
    - **O** Female
    - **O** Prefer not to answer
3. **What is your current role?**
    - **O** Nurse
    - **O** Nurse practitioner
    - **O** Resident
    - **O** Fellow
    - **O** Attending physician
    - **O** Respiratory therapist
    - **O** Other (please specify): _____

4. **[If applicable] What physician role do you identify as?**
   - **O** Primary clinician
   - **O** Clinician scientist
   - **O** Clinician educator
   - **O** Clinician administrator
   - **O** Other (please specify): _____

5. **How many years have you worked in your current role?**
   - **O** Please specify: _____

6. **How many years have you worked in critical care?**
   - **O** Please specify: _____

7. **What is your place of residence (e.g., where are you currently working)?**
   - **O** Alberta, City (please specify): _____
   - **O** British Columbia, City (please specify): _____
   - **O** Manitoba, City (please specify): _____
   - **O** Saskatchewan, City (please specify): _____
   - **O** Ontario, City (please specify): _____
   - **O** Other (please specify): _____

8. **What type of institution are you currently working in?**
   - **O** Academic
   - **O** Non-academic
   - **O** Regional
   - **O** Urban
   - **O** Other (please specify): _____

9. **How many beds in total does your hospital have?**
   - **O** ≤250
   - **O** 251-499
   - **O** 500-1000
   - **O** >1000
   - **O** Other (please specify): _____

10. **How big is the population your hospital serves?**
    - **O** Please specify: _____

11. **How many beds in total does your ICU have?**
    - **O** Please specify: _____

eAppendix 4 Decision-maker interview guide

Understanding and managing the effects of COVID-19 restricted visitation policies – ICU Healthcare Decision-maker Semi-Structured Interview

Introduction

Thank you for agreeing to participate in today's discussion about how restricted visitation policies have impacted healthcare providers of critically ill patients. We are conducting interviews with healthcare Decision-makers of critically ill patients across Canada. We look forward to the opportunity to learn from your experiences. **These topics serve as a guide only**. If there are other insights you would like to offer, we would like to hear them.

We emailed you a copy of the informed consent form. The consent form is part of the process of informed consent. It should give you a basic idea of what the research is about and what your participation will involve.

Did you receive the consent form and have a chance to read through it? Good.

Because it is important that you understand your rights as a participant, I just want to review the main elements in the consent form:

[Interviewer will read the REB approved Oral Consent Script if healthcare Decision-maker did not review the consent form that was sent before the interview]

Before we start the discussion, I would like to remind you that we will be recording this discussion in order for us to accurately capture our discussion. Do you agree to be recorded for research purposes?

<If participant agrees, start recording>

Can you please verbally state that you consent to participate in this study?

Thank you for joining me. When the COVID-19 spread happened in Canada, hospitals wanted to stop the spread of COVID-19 and save personal protective equipment (PPE) like masks and gloves, and hospital gowns. To do this, many hospitals enacted restricted visitation policies to limit family members visiting a patient in the Intensive Care Unit. Today we will be discussing your experiences with these restricted visitation policies during COVID-19. Your experiences will help us describe and understand how changes to visitation policies have impacted the mental health and experiences of healthcare Decision-makers. The findings from this research will help inform recommendations for visitation policies across Canada

Semi-structured interview questions
Discussion points: knowledge, experiences, perceptions, behaviors, underlying drivers, and implications

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Topic 1: COVID-19 restricted visitation policies

9. We will begin with your experience with COVID-19 restricted visitation policies.

    c. How have you been involved in the decisions on COVID-19 restricted visitation policies for ICUs?
        i. At the beginning of the outbreak? Throughout?
        ii. Probe: What parties were involved in developing the restricted visitation policies? (Public? Healthcare staff? Patients/Families?)
        iii. Probe: Did you get a chance to visit hospitals and see how the restricted visitation policies have been implemented?
        iv. Probe: How was the visitation policy communicated? (to hospitals/staff)
        v. Probe: Did the visitation policies change?
        vi. Probe: Do you think the visitation policies were appropriate?
        vii. Probe: What are the key elements to include in a visitation policy?

    d. What factors were considered in the development of these visitation policies?
        i. Probe: To what extent did your personal experiences play a role?
        ii. Probe: Were there any resources that you had access to or would have liked to have access to in making decisions?
        iii. Probe: How did you decide exceptions?

    e. What aspects of developing restricted visitation policies was easy? What aspects of developing restricted visitation policies was difficult?
        i. Probe: To what extent do you feel like you had control over the decisions made for restricted visitation policies?
        ii. Probe: Were there instances of disagreement between Decision-makers during the development of the restricted visitation policies? How was this handled?

10. We are going to talk now about the ways in which COVID-19 restricted visitation policies affected you.
    d. How did these visitation policies impact you on a personal level?
        i. How did it impact you in comparison to other policies you've been involved in the development of?
        ii. To what extent did you feel responsible for the restrictions enacted in the visitation policies?
        iii. Probe: Did your sleep pattern change?
        iv. Probe: Did your routine after work or on days off change?
        v. Probe: How did it impact your relationships?

e. How did you handle feedback received on the restricted visitation policies?
    i. Probe: Were there any resources that helped you to handle or cope with feedback?
    ii. Probe: What kinds of feedback were easiest to handle? What kinds of feedback were most difficult to handle?

11. What suggestions do you have for future visitation policies for future pandemics or for times when visiting is not possible?
    a. Probe: Is there anything you would change or do differently next time?
    b. Probe: What would be the key facilitators and barriers to implementing a restricted visitation policy?

12. Closing questions:
    a. We still haven't heard very much about (insert topic that hasn't yet been raised). Do you have any thoughts about this?
    b. Thank you for providing your insight on restricted visitation policies. Do you have any final thoughts?

<turn off recorder>

Structured Demographic Questions

We are collecting personal and family demographic information in order to describe our participants in aggregate. Contact information is only for us if you would like to review the report generated from this work to ensure that it reflects your experiences. Please note that your demographic information and contact info will be stored in a password protected database that is only accessible to the study research team. If you are not comfortable answering any of the below questions you are welcome to skip any or all of those you do not wish to answer.

If applicable: What email address/mailing address do you wish to receive your transcript?

_____

Demographics questions:

12. What is your age group?

O <20 years
O 20-29 years
O 30-39 years
O 40-49 years
O 50-59 years
O ≥60 years

13. What is your sex?

O Male
O Female
O Prefer not to answer

14. Please indicate your ethnic or cultural group (select all that apply).

Please note that the examples provided are non-exhaustive and are meant to be a guide to help you respond to the question.

☐ First Nations
☐ Inuit
☐ Métis
☐ Other North American Origins (e.g. Canadian, American, Acadian)
☐ British Isles Origins (e.g. English, Irish, Scottish)
☐ Western European Origins (e.g. French, German, Dutch)
☐ Northern European Origins (e.g. Swedish, Finnish, Icelandic)
☐ Eastern European Origins (e.g. Russian, Latvian, Hungarian)
☐ Southern European Origins (e.g. Albanian, Italian, Spanish)
☐ Caribbean Origins (e.g. Cuban, Dominican, Bahamian)
☐ Latin, Central, and South American Origins (e.g. Brazilian, Mexican, Venezuelan)
☐ Central and West African Origins (e.g. Cameroonian, Nigerian, Sierra Leonean)
☐ North African Origins (e.g. Egyptian, Moroccan, Sudanese)
☐ South and East African Origins (e.g. Ethiopian, Rwandan, Zimbabwean)
☐ West Central Asian and Middle Eastern Origins (e.g. Afgan, Iranian, Palestinian)
☐ South Asian Origins (e.g. Bangladeshi, Pakistani, Punjabi)
☐ East and Southeast Asian Origins (e.g. Chinese, Japanese, Vietnamese)
☐ Ocean and Pacific Islands Origins (e.g. Australia, Fijian, Polynesian)
☐ Prefer not to answer
☐ Other: _____

15. What language do you speak most often at home?

O English
O French
O Mandarin
O Cantonese
O Punjabi
O Spanish
O Arabic
O Other (please specify): _____
O Prefer not to answer

16. What is your employment status?

O Full Time
O Part Time
O Casual

17. What is your current role?

O Other (please specify): _____

18. How many years have you worked in your current role?

O Please specify: _____

19. What is your place of residence (e.g., where are you currently working)?

O Alberta, City (please specify): _____
O British Columbia, City (please specify): _____
O Manitoba, City (please specify): _____
O Saskatchewan, City (please specify): _____
O Ontario, City (please specify): _____
O Other (please specify): _____

eTable 1 Consolidated Criteria for Reporting Qualitative Research (COREQ) Checklist

Domain 1: Research team and reflexivity		
Personal Characteristics		*Location in Manuscript, section (page number)*
Which author/s conducted the interview or focus group?	KLS	Title page
What were the researcher's credentials? E.g. PhD, MD	KMF (PhD), KDK (PhD), NJ (MD), KLS (RN MN), SM (MSc), HTS (MD PhD), JPL (PhD)	Title Page
What was their occupation at the time of the study?	KMF (Assistant Professor), KDK (Research Associate), NJ (Attending Physician), KLS (RN), SM (Research Assistant), HTS (Professor, Attending Physician), JPL (Assistant Professor)	Not reported in manuscript
Was the researcher male or female?	Female: KMF, KDK, NJ, KLS, SM, JPL Male: HTS	Not reported in manuscript
What experience or training did the researcher have?	All (training in qualitative methods, facilitator experience)	Methods (page 8)
Relationship with participants		
Was a relationship established prior to study commencement?	Yes	Methods (page 7)
What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	Prior to commencement of the semi-structured interviews, participants were e-mailed the objectives of the semi-structured interview and understood it was a research project and ethical approval had been granted. Participants understood what their participation included, and all questions were answered prior to giving their consent.	Methods (page 7)
What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	No interviewer-related biases identified.	-
Domain 2: Study design		
Theoretical framework		
What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis,	Thematic analysis (Braun and Clarke 2006)	Methods (page 8)

ethnography, phenomenology, content analysis		
Participant Selection		
How were participants selected? e.g. purposive, convenience, consecutive, snowball	Purposive	Methods (page 7)
How were participants approached? e.g. face-to-face, telephone, mail, email	Recruited via e-mail, social media	Methods (page 7)
How many participants were in the study?	44	Results (page 9)
How many people refused to participate or dropped out? Reasons?	NA	NA
Setting		
Where was the data collected? e.g. home, clinic, workplace	Virtually via phone, Skype, Zoom, or Microsoft Teams	Methods (page 8)
Was anyone else present besides the participants and researchers?	No	NA
What are the important characteristics of the sample? e.g. demographic data, date	Demographic data	Table 1, Results (page 9)
Data collection		
Were questions, prompts, guides provided by the authors? Was it pilot tested?	Interview guides were provided to participants by the authors. All interview guides were pilot tested with an ICU RN, physician, and family members.	Methods (page 7), Appendix 1, 2, 3
Were repeat interviews carried out? If yes, how many?	No	NA
Did the research use audio or visual recording to collect the data?	All semi-structured interviews were audio recorded using an audio tape recorder	Methods (page 8)
Were field notes made during and/or after the interview or focus group?	Yes	Methods (page 8)
What was the duration of the interviews or focus group?	Decision-makers, physicians, and RNs: 30-45 minutes Patients/families: 1 hour	Methods (page 8)
Was data saturation discussed?	Yes	Limitations (page 17)
Were transcripts returned to participants for comment and/or correction?	No. A personalized summary of the interview was sent to participants.	Methods (page 8)
Domain 3: analysis and findings		
Data analysis		
How many data coders coded the data?	Four	Methods (page 8)
Did authors provide a description of the coding tree?	Yes	Results (page 9), Appendix Table 2
Were themes identified in advance or derived from the data?	Themes were derived from the data	Methods (page 8)
What software, if applicable, was used to manage the data?	NVivo12	Methods (page 8)
Did participants provide feedback on the findings?	A summary of the interview was returned to the participants for comment or correction	Methods (page 8)

Reporting		
Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Yes, but no quotation was identified with participant numbers	Results (pages 9-15), Appendix Table 2
Was there consistency between the data presented and the findings?	Yes	Results (pages 9-15), Appendix Table 2
Were major themes clearly presented in the findings?	Yes	Results (pages 9-15), Appendix Table 2
Is there a description of diverse cases or discussion of minor themes?	Yes	Results (pages 9-15)

eTable 2 Themes and subthemes for impacts of restricted visitation, identified by decision-makers, physicians, registered nurses, and patients/families

Themes and subthemes	Patients or family members	Physicians	Registered Nurses	Decision-makers	Quote(s)
Responses to restricted visitation					
Acceptance of circumstances	✓	✓	✓	✓	"But, all in all, I mean, like I say, just despite the fact that I was worried and I was wanting to be there. I understood why I couldn't. I was thankful that he had the care that he did have." *-Family member* "I think most families understood them. It was rarely a situation where there was a fight, because I think everyone knows that there was a pandemic and understood that they couldn't be present like they had previously to the pandemic" *-Decision-maker* "…a lot of these policies have been ones that have been dictated mostly at a provincial level or at a Health Authority level, and therefore the feeling that you can't fight against that or therefore it's the law, in some sense, and we're just doing what we're asked to do" *-Physician* "I think everybody did their best, and that's all you really ask for" *-RN*
Appropriateness	×	✓	✓	✓	"When I said it's appropriate at the very beginning, I meant mostly that it was expected based on the frameworks that are currently...with decision-making. Whether it's appropriate in the sense that is it okay, dying patients shouldn't have family access during that time? I would say in short, no." *-Decision-maker*

					"Restaurants, bars were opened. And it was funny because we were in the situation where it was super easy to go, I mean, to go in a restaurant or bar in June, why it was not possible to visit someone liberally in the hospital? -*Physician* "... I understand logically where the restrictive visitation policy is coming from, but prior to this family was such an important part of our patient care in the ICU and involving the family and having them come in and support the patient as they either progressed or unfortunately didn't progress." -*RN* "I just thought it was too bad that they couldn't somehow meet him, escort him in with all the proper PPE, take him to his mom and they could spend time together. I think he got to go finally at the very end, but leading up to it, it was just a phone call and she was sitting alone in a room by herself every day. That made me kind of sad. I felt like that's not much quality for the end of your life when they both have it so they can't give it to each other."-*RN*
Impact of restricted visitation					
Patient care	✓	✓	✓	✗	"If you've been there for months, you kind of need somebody on the outside, to whether it's laundry or anything else, to act as your courier to bring things in and take things out." -*Patient*

					"…I got to make sure that when you're having conversations some people remember it all and for me, you know, I might forget something five minutes after somebody told me and maybe I forget to relay it to her, you know what I mean? So an extra set of ears is a lot better than just getting fed information, right?" *-Patient* "…patients, I'm quite certain that having family members there, orienting them, providing consistency, helps ward against things like delirium and improves outcomes. Having family there that, you know, love and prayers go a long way as part of supportive therapy and improving people clinical picture. So I think that it's possible that outcomes were worse because family was not there. And I certainly, I heard stories of family members having anxiety and stress breakdown and showing up in the emergency department because they couldn't handle their loved one being sick and not being able to be with them." *-Physician* "…but when they become so much that every single family member needs to call and come and say their piece, I feel it takes away from the quality of my patient care. I'm not sure if people agree with me on that but, every minute I spend at the phone is a minute spent away from my patient at the bedside where I could be doing that extra little bit…" *-RN*
Psychosocial impact	✓	✓	✓	✓	"We all felt badly that we couldn't see him, and we felt badly that he must have suffered through his last few days and

					not understanding what was going on around him and why no one was coming to see him. We feel guilty about that." *-Family member* "I didn't sleep at night, wondering if... You just want to make sure if someone is alive, and that might sound like your anxiety is at a 10 over 10, but mine was" *-Family member* "I mean, sure I would say sometimes I'd wake up in the middle of the night and I thought about decisions that I had to make or made around visiting" *-Decision-maker* "I think that is inhumane, and I don't think that we should ever go back to that again. The staff and the physicians, they were distressed around this. It took a lot out of them dealing with what they heard when they heard these complaints, they felt compassion for folks that were not able to be with their loved ones and it really tore at them. And yeah, I think we somehow need to take that pressure off of our care providers. They're being burdened beyond what is reasonable." *-Decision-maker* "But at one point I just remember having to tell a family that only two loved ones could come in and see the patient. That just broke their hearts. That was a real big challenge. Then for any family that was out of country where you had to say, 'If you could even find a flight and fly in, you'd have to quarantine yourself, isolate for 14 days so you just can't come. There's no way that this is going to be feasible for your loved one.' I

					found that to be quite morally distressing” *-Physician* “I found it was very challenging, very anxiety provoking, having these patients so sick and knowing that family couldn't be present” *-RN* “I've definitely felt some kind of moral distress more so recently in the last month, month or two, where it's been really hard to tell families that no, they actually can't visit or you can only have these certain people visiting” *-RN*
Relationships	✗	✓	✓	✓	“normally do enjoy the relationships with patient’s families that come up along the way. So, that had been absent, and there were so many other things going on during the height of the COVID pandemic, back in April and May, that it's hard to know what might've had an impact here or there” *-Physician* ” I just feel like the family sees you as a bad guy and you lose a bit of trust in that relationship that you've built with the family” *-RN* “Every time I break the rules in my institution and say that I'm inviting a group of 12 to be present at a family's bedside at the time of dying, someone hears about it. And the next day I get an email from someone saying it was inappropriate that I invited in as many people to be present at this time. And obviously I respond, and you have a conversation…” *-Decision-maker*

Changed responsibility	✓	✓	✓	✓	"I think it's a lot to ask for a [older family member], to be the dispatcher of very medical information and not always the easiest information, while trying to be the only person allowed in the hospital. It's a lot to put on, for one person to play a variety of roles, caregiver, [family member], a driver in downtown [city] traffic. It just made for probably a more difficult time on my [family members] than it needed to be." -*Family member* "…for three months I worked 24/7 and it was nonstop" -*Decision-maker* "…there was expectations that we would call or organize a Zoom meeting with them every day. So it in fact, gave us a lot of extra work, in addition to working in a hostile environment. And instead of having our common discussions, that would be sometimes more on just a quick update to the bedside, we needed to have organized Zoom calls and it was more complicated to reach out to the family." -*Physician* "…found it very efficient because there was no family and, essentially we decided when to talk with them. Usually it was mid-afternoon. And as I said, I mean, it took less time for sure. I mean, I would say probably after five, 10 minutes of an update from a patient that was otherwise stable, that was it" -*Physician*

					"So I think obviously without visitation, you're going to have more phone calls from more family members, especially as it spread out across the province or country and stuff like that. And then as well, if there's family dynamics, obviously that changes things. So definitely we had more phone calls and stuff like that" *-RN* "…but it decreased my workload in that the families weren't here and you didn't have to do all that explaining all the time to them, or dealing with them while they're in hospital" *-RN*
Trust in the healthcare system during the pandemic					
Tension	✓	✓	✓	✓	"I stopped calling. I stopped calling because I couldn't deal with the rudeness or being spoken to like a child like, 'Do you understand how busy we are?' And this and that, 'We have one contact person for a reason.' And as a family member sitting kilometers away, I just wanted to know if he was alive, that's all." *-Family member* "…he was alone in the room because he needed the respirator and other few machines to help him breathe and whatnot. So he was totally isolated because of COVID, the possible infection, and contact, so he was alone…I was not allowed to know I was forbidden and blocked from knowing. Even though I missed him, and I was ready to do whatever to get the information, and to prove who I was, that was not even a remote possibility, which I find despicable." *-Family member*

					"…my brother, the only way that he can visit is that if we alternate days and he uses my father's name at the admission desk or the entry point. And says that he's my father, here to visit the patient…but that's the way that we've had to work around, because otherwise, he wouldn't be allowed to see his mother at all during her acute illness." *-Family member* "This caused a little bit of a different kind of distress because now if you worked today, tomorrow it might be different. And how do we manage a policy that was being changed from moment to moment? That was difficult for staff and it increased their anxiety and it increased their fear. They began to think, 'Do we really know what we're doing? We keep changing this policy. So it doesn't look like we know what we're doing.' But it really was because more information was becoming available." *-Decision-maker* "… I started to hear about the, not necessarily loopholes, but different ways that people found to get around the policies, like finding a back door and sneaking family members in and going out to meet them in person, which I don't know if that was even allowed necessarily by [the health authority]." *-Physician* "…but I don't know what else you can do. People sneak in. I've had people try to sneak in on us. Where do you stop that?" *-RN*

					"I mean, this is a story that we always hear. Nurses say something, then the family is like, 'I want the doctor,' and doctor says it and it's like the exact same thing that they said. So it's like families don't want to believe. They want to ask the person until they hear the answer they want to hear." *-RN*
Transparency	×	✓	✓	×	"I feel like and what I strive for, is transparency in care, and pulling back the curtains and showing people what we're doing with their family members. I'm a big fan of including family members on team rounds in the morning. If God forbid, there's a cardiac arrest in the unit; I'm one to, in the right time, bring the family member to the bedside and show them what we're doing to try and save their family member. And it became harder to build trust with family members, because they had no idea what we were doing." *-Physician* "Families often worry because they can't see the progress. They can't really truly appreciate the severity of the situation. For example, intubated patient who's dying, the families don't often appreciate it until they see how much we're doing for the patient, how much we're trying to save them or what are we doing to make them comfortable, how are we caring for them at the bedside." *-RN*
Rebuilding relationships	×	✓	×	×	"…you know they're at home, they maybe hopefully have talked to a nurse, but they've got a lot of questions that can't be answered and so that uncertainty and worry and concern, the anxiety builds to

					the point that the interaction that you have eventually with someone who's anxious, concerned, has no answers, is never as good. And that you have to spend an amount of time trying to address that and then sort of get to the therapeutic part of the relationship where you can talk about other things that are happening with the patient." *-Physician*
Modes of communication					
Personal challenges	✓	✓	✓	✓	"I don't know about other people, but our father being of an earlier generation, doesn't use technology very much, not even the telephone. So he doesn't get the full advantage of what possibilities there could be for connection with the family." *-Family member* "But then as these actual restrictions hit reality, it was really hard. So I think initially hearing from our healthcare workers, especially from physicians just being like, 'This is wrong. I can't actually have a good conversation with this patient without their family there. I need to discuss goals of care for these patients and doing that over an iPad is just not the same experience.'" *-Decision-maker* "It was very difficult to communicate with her. And despite having Zoom, it was very difficult. So we allowed the patient's son to come to visit her" *-Physician* "I think it's really important to note, at least in [City] and in our area, we have a lot of low income families that don't have iPads, don't have phones. And so one of the things when our visiting opened up, we became a

					locked unit. Well, we've always been a locked unit, but we've always had a phone on the outside in our waiting room to call in. Well, the waiting room they closed and you can't get to the phone to call in, so then you have to use your personal cell phone to call into the unit to ask to be let in, but what happens when you don't have one?" *-RN*
Operational challenges	✓	✓	✓	✓	"She was unable to hold the phone, and just too weak. She was unable to hold the phone so that the mouthpiece was where we could communicate, the ear piece was where she could hear us. A couple of times she kept saying, 'I can't hear you, I can't hear you.' And I knew that there was nobody there to adjust the phone so she could hear us. So I think the effort and the good will was there to try and ensure that family members could communicate with their loved ones. But in a practical way, sometimes that didn't work out as it was intended." *-Family member* "So we utilized technology, I purchased 50 iPads. We spread those out among our units. It sounds easy, but then you do need to develop guidelines around how to clean them, how to use them, make sure you have all the right programs downloaded. They need to interface with multiple programs, so although just giving out iPad sounds easy, it was not that easy. And we had a whole group, including physicians that came together to assist with the decision-making around how those iPads would be allocated and the education that needed to go out with them. It helped, but it didn't solve all

					of the distress that was associated with people not being with their loved ones" *-Decision-maker* "People have to be trained on the devices, how you clean the devices if we're going to use it in a COVID ward, so what does that look like? What's our infrastructure like, in terms of, it's one thing to have the iPads there, but the microphones aren't particularly good on them, right? How do you actually understand people when you're trying to do that as a group round? So, we'll round in our COVID unit as a group multidisciplinary and trying to find... get the microphones that people could actually understand and feel like they're engaged with that." *-Physician*
Modality	✓	✓	✓	✓	"But being a bit older generation, he did not find it very comforting. Not being very familiar with the technology. The personal visits were much more important for his emotional support." *-Family member* "It would be telephone. It was all telephone, and you had to remember, because when... It's like when something's in your face, there's a visual trigger forever completing that task or remembering to do that. And so, when the families are around, you just stop in and speak to them, but when they're not around and they're at home and you've got a bunch of other things going on, you really had to make time and remember to give them a call." *-Physician*

					"Usually, it's over the phone. I think there's a lot of confidentiality kind of limitations for us over the phone. We did make an effort to have an iPad around so that our families and patients could FaceTime when they wanted to" *-RN*
Availability	✓	✓	✓	✖	"…they had set up a television for him so he could watch hockey. [laughs] That was the other thing, I guess I didn't mention that when I said they set up the phone. They set up a television for him as well at no charge." *-Family member* "What I would say from a positive point of view, thanks to [health authority] for providing a reasonably decent wireless internet service and not charging for it. That certainly makes things like connecting with friends and family by Skype or whatever other means a whole lot easier." *-Family member* "I don't know. I know they had started to offer things like FaceTime, and I didn't have access to that." *-Family member* "So we had tablets. [Deleted] the phone company provided us with I think 55 Android tablets at the end of April. So we were able to use it to communicate with families and for intubated or non intubated patients to use the tablets to make the link between the patient and their family." *-Physician*

					"It was quite a bit of a challenge to Zoom with patients because of restricted access to tablet" *-Physician* "We have many patients who don't have phones, or their family members don't have phones or they just don't have the money for it and they can't call in. So then they stand waiting until we notice on the cameras and go out and talk. And it's so silly because we have a waiting room sitting right there that you could easily take the chairs up, do something with the chairs so that people aren't sitting in mingling, so they can use the phone. It just seems so odd." *-RN*
Impacts of policy implementation on clinical practice					
Organizational factors	✗	✓	✓	✗	"…you easily spend the entire half a day just monitoring the donning and doffing of equipment" *-Physician* "…make sure that they're actually enforcing [the policy] because that's where we've been having some challenges" *-RN*
Changes in communication structure	✓	✓	✓	✗	"She could call in at anytime, nine times out of 10 someone was too busy to talk to her. So it was through my [deleted] experience that I was able to tell my [family member], if you call between 05:00 am, and 06:30 am, you're most likely to get a response, if you call from 10:00 am to noon, a better chance because the shift change would be done, and if you called after 8 pm. So it was me giving her the ideal times, after quite a bit of frustration of her calling and not being able to talk to the nurse and being spoken to rather rudely that she was calling for

					information during busy times. That they didn't have the time to keep answering the phone every time she called, we were told every time someone calls the nurse has to doff all the PPE, wash up and answer the phone instead of taking care of a loved one" *-Family member* "There were definitely consequences for family members, and that we all felt kind of disconnected from her. And I would say as a health care provider that I felt disconnected from getting first-hand information from other health care provider colleagues. And meaning if I was there, it was great to interact with the internist or the consulting team that was coming in. But other than that, I found that I had to request that. And some health care providers were more accommodating than others." *-Family member* "I understood from my brother that it was not as easy to get all the information he wanted, as he would have liked. He found it difficult to contact the doctors and the nurses, or to get them to give him the information he needed." *-Family member* "I think it's easier to convey difficult news in person, because you can share in that emotional exchange rather than in the more sterile phone environment. So, the difficult stuff was more difficult, I think, via the phone. The update as to progress, specifically if progress was good, I found was fine in that. And I think that that can be done on the phone and often is. It was more so if things weren't

					going well, that was challenging.” *-Physician* “I think the difference is that you're missing those casual daily updates, those really small things. Sometimes I'll say to the family is, "All right. We're going to do more of the same today. We're watching. We're doing the same things. Things are getting better. That's all your update is” *-Physician*
Family attributes	✓	✓	✓	✓	“So he doesn't like making small talk and all that kind of stuff. It's not his thing. So he was fine with the lack of visitors, other than the boredom. But I mean, as far as not having a bunch of people in all the time, he was fine with that. He wouldn't like that anyway.*“* *-Family member* “Yeah, I guess. Mum probably felt in some ways a little hurt that when I was still allowed one visitor that the person picked was my brother.” *-Patient* “…her end-of-life dying wish was to have all of her five children close by the bedside when she took her last breath. But it didn't fit within the three people.” *-Decision-maker* “… it actually ended up working quite well because it was a very disjointed family. They didn't get along so the [parent and sibling] of the patient were in person in the room and the partner, who the family did not like whatsoever, was on Zoom. We actually positioned it so I was sitting facing the [parent and sibling] and then the Zoom camera or computer was between us… It

					actually probably mitigated a lot of arguments that could have happened." *-Physician* "For example, we had 10 family members drive two hours…because their loved one had almost died multiple times that day. And they were told like if you come in... And I guess word spread among the family that they assumed they should all come in. They didn't call first and they showed up at 11:30 at night after driving for two, two and a half hours." *-RN*
Accurate portrayal of patient's health	✗	✓	✓	✗	"this impacted older care discussions as well because often it's hard to change goals. Changing goals in care, if I think that there's situations where we're providing futile care, often if you bring the family to the bedside and show them what life support looks like with maybe a frail 80 or 90-year-old family member, they say, "Whoa, whoa, this is too much. This isn't what my family member would want. Look at the machines keeping her alive." Without the ability to have them there at the bedside and show them the potential for undue suffering, this was also more challenging path for older care discussions." *-Physician* "The no visiting kind of made a few things difficult; patient comfort, for example, more of a mental state. Families often worry because they can't see the progress. They can't really truly appreciate the severity of the situation. For example, intubated patient who's dying, the families don't often appreciate it until they see how much we're doing for the

					patient, how much we're trying to save them or what are we doing to make them comfortable, how are we caring for them at the bedside." *-RN*
Policy changes	✗	✓	✓	✓	"…if you worked today, tomorrow it might be different. And how do we manage a policy that was being changed from moment to moment?...But it really was because more information was becoming available." *-Decision-maker* "I was very vigilant to ensure that, every time we did something, it was vetted through someone who knew the policies a lot more than me because I just wanted to make sure that we weren't breaking them necessarily. I did find, however, it incredibly difficult to keep up with the policy changes because it was just so rapidly evolving" *-Physician* "But I think it was the level of maybe the rules weren't very defined. And that's what we found throughout this pandemic, when there were new rules coming out, it wasn't clear" *-RN*
Consistencies	✗	✓	✓	✓	"…I broke those rules on a dozen or numerous different occasions to allow family members into the ICU…" *-Decision-maker* "The angst created for both family and staff, the moral dilemmas of, if you've got a patient dying and only one family member can come in. Let's say the family member has three children and only one of them is allowed to visit that caused a lot of distress for the family and caused a lot of distress for the staff. The

					biggest issue was that if anyone complained to senior management about the policy, they overruled the policy and allowed the family to visit." *-Physician* "I would say for the most part they followed the policy, but I think when it comes to ICU nurses, we can be a little fiery. And so there was some exceptions made, I think maybe I was one of them, but I guess my stronger belief is that some-one shouldn't die alone and I'm no substitute for a wife of 45 years. So there may have been a few exceptions, but they were fought for by the whole unit kind of deal." *-RN*
Ethics	✖	✓	✓	✓	"…how do you judge that fairly between patients too? There was some moral distress from stuff as well about, they're like, 'Well, this family's educated and what, and articulate and so they can advocate to come in. But then this family here is not educated and …and they're not articulate or maybe English is their second language and they don't have the skills to advocate. So then they don't get visitors. That's not fair." So it really caused a lot of, I think, anxiety for staff that way as well." *-Decision-maker* "Again, there is a bit of a challenge of the confidentiality piece. We can only communicate what we can and then the families will need to come in. There was something major. We would invite them to come in for a family meeting. Despite the no visitor, we make sure we had a clear and socially distance capable spots to speak to them about that." *-Physician*

For each subtheme a "✓" indicates that this theme was identified for the stakeholder while a "×" indicates that this subtheme was not identified for the stakeholder."

RN = registered nurse