


Providing compassionate care in a virtual context: Qualitative exploration of Canadian primary care nurses' experiences

DIGITAL HEALTH
Volume 10: 1–12
© The Author(s) 2024
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/20552076231224072
journals.sagepub.com/home/dhj



Geneviève Rouleau^{1,2} , Kelly Wu¹, Monica Parry³, Lauralie Richard^{4,5}
and Laura Desveaux^{1,6,7}

Abstract

Objective: Virtual care presents a promising opportunity to create new communication channels and increase access to healthcare. However, concerns have been raised around the potential for unintended emotional distances created through virtual care environments that could strain patient–provider relationships. While compassionate care is an enabler of emotional connectivity and a core tenant of nursing, little is known about whether or how nurses have adapted their compassion skills into virtual interactions. These concerns are particularly relevant in primary care, where there is a focus on relational continuity (i.e. relationship-based, longitudinal care) and a broad uptake of virtual care. The aim of this study was to explore the meaning of compassionate virtual care and to uncover how nurses operationalized compassionate care through virtual interactions in primary care.

Methods: We used a qualitative interpretive descriptive lens to conduct semistructured interviews with primary care nurses (Ontario, Canada) who had provided virtual care (i.e. video visits, remote patient monitoring, or asynchronous messaging). We used a thematic approach to analyze the data.

Results: We interviewed 18 nurse practitioners and two registered nurses. Participants described how: (1) compassionate care was central to nursing practice, (2) compassionate care was evolving through virtual nurse–patient interaction, and (3) nurses balanced practice with patients' expectations while providing virtual compassionate care.

Conclusions: There is an opportunity to better align nurses' understanding and operationalization of compassionate care in virtual primary care contexts. Exploring how compassionate care is operationalized in primary care settings is a necessary first step to building compassionate competencies across the nursing profession to support the continued virtual evolution of health service delivery.

Keywords

Compassion, digital technology, empathy, nurses, primary health care, qualitative research, virtual care

Submission date: 8 February 2023; Acceptance date: 14 December 2023

¹Women's College Hospital Institute for Health System Solutions and Virtual Care, Women's College Hospital, Toronto, Ontario, Canada

²Nursing Department, Université du Québec en Outaouais, Saint-Jérôme, Québec, Canada

³Lawrence S Bloomberg Faculty of Nursing, University of Toronto, Toronto, Ontario, Canada

⁴Department of General Practice and Rural Health, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

⁵Faculty of Nursing, Université de Montréal, Montréal, Québec, Canada

⁶Institute for Better Health, Trillium Health Partners, Mississauga, Ontario, Canada

⁷Institute for Health Policy, Management, and Evaluation, University of Toronto, Toronto, Ontario, Canada

Corresponding author:

Geneviève Rouleau, Nursing Department, Université du Québec en Outaouais, 5, rue Saint-Joseph, Saint-Jérôme, Québec, Canada, J7Z 0B7; Women's College Hospital Institute for Health System Solutions and Virtual Care, Women's College Hospital, 76 Grenville St, Toronto, Ontario, Canada, M5S 1B2.

Email: genevieve.rouleau02@uqo.ca



Introduction

Health systems around the world continue to prioritize brevity in health interactions as a mechanism to improve access and efficiency,¹ while balancing patient outcomes in a demanding and resource-constrained environment.² Modernization efforts have ushered in a shift toward virtual care with a marked acceleration catalyzed by the COVID-19 pandemic.^{3,4} Virtual care is defined as “any interaction between patients and/or members of their circle of care, occurring remotely, using any forms of communication or information technologies, with the aim of facilitating or maximizing the quality and effectiveness of patient care.”⁵ Primary care was an early implementer of virtual care and saw a significant increase in uptake during the pandemic.^{4,6,7} In Ontario, the largest Canadian province, virtual visits represented 71.1% of all primary care visits during the first four months of the pandemic in 2020 compared with 1.2% of all primary care visits during the same period in 2019.⁴

Virtual care brings with it a promising opportunity to increase access and create new communication channels. This promise is balanced by concerns that the implementation of virtual care will occur at the sacrifice of compassion, placing undue strain on the patient–provider relationship by creating emotional distances.^{8,9} Compassionate care is a vital component of quality care,¹⁰ and a critical aspect of healing.¹¹ Compassionate care positively impacts patient suffering, safety, well-being, and the quality of therapeutic relationships.^{12–14} A widely cited definition of compassionate care includes five key elements: (1) awareness of another’s experience of suffering or need, (2) feeling “moved” and concerned for another person’s suffering or need, (3) appraising one’s own social role and abilities within the context of the suffering, (4) making judgments about the person who is suffering and their situational context, and (5) feeling driven to help.¹⁵

Compassionate care in a virtual context is referred to as *digital (or virtual) compassion*.¹⁶ It can be influenced by the use of digital tools at the individual (including patient, healthcare provider, caregiver), dyadic (between patient and provider), and organizational and system levels.⁸ For example, at the individual provider level, clinicians need to mobilize a range of skills (e.g. technical, clinical, relational) to feel confident and able to provide virtual compassionate care.¹⁷ At the individual patient level, patients not only contend with a shift in communication dynamics, but a shift that is exacerbated by a lack of perceived choice between various healthcare modalities (i.e. in-person and virtual visits).¹⁷ At the dyadic level, the virtual healthcare environment can lead to a “loss of shared physical space and opportunity to build rapport.”¹⁸ Indeed the difficulty of recognizing verbal and nonverbal cues during virtual clinical encounters, challenges of gathering information, and technological issues present barriers for communication

and building rapport.¹⁸ At the organization level, there are a myriad of factors that impact virtual compassionate care. These include resources, time for virtual visits, technology infrastructure and supports, as well as human factors (e.g. provider burnout).^{8,19} At the system level, societal and community perspectives on compassion and technology, as well as social and health equity issues play a critical role in determining how compassionate care is exhibited and delivered on virtual platforms.⁸ Compassionate care occurs at different sectors and settings of the healthcare system. Primary care functions as a primary access point to the healthcare system and is a relationship-based specialty,^{20,21} making this setting ideal to explore the operationalization of compassionate nursing care in a virtual context.

Compassion is a foundational competency of nursing practice^{22,23} and while the concept of compassion in a virtual context has received some attention in the nursing literature,²⁴ little is known about whether or how nurses have been able to adapt compassionate in-person skills to virtual interactions. A scoping review²⁴ was conducted to explore the nursing literature on the ways nurses provide compassionate care when using digital health technologies.²⁴ A total of 28 papers were included and grouped into three themes, including the: (1) definition and operationalization of compassionate nursing care in the context of digital health technology, including the various attributes of compassion (e.g. caring behaviors, presence), (2) relation between compassionate nursing care and the use of a range of technologies (e.g. electronic medical records, telecommunications), and (3) strategies to educate and support nurses’ capacity building around digital health and compassionate care. The majority of included studies were conducted in healthcare units (18/28, 64.29%); none targeted primary care settings.²⁴ While efforts have been made to understand the ideal attributes of compassionate nursing virtual care, it remains unclear whether and how nurses are translating it in practice. To address these gaps in the literature, the objectives of this study were to: (1) explore the meaning of compassionate care in a virtual primary care context, and (2) understand how nurses have operationalized compassionate nursing care through virtual primary care interactions.

Methods

The reporting of this qualitative study was informed by the Consolidated Criteria for Reporting Qualitative Research Checklist.²⁵ Our epistemological foundation to guide this study is based on an interpretive description coming from nursing science.^{26–28} This approach “assumes nurse investigators are rarely satisfied with description alone and are always exploring meanings and explanations that may yield application implications.”²⁸ An interpretive activity is undertaken even when a study is pursuing a descriptive

purpose.^{27–30} We aimed to provide a comprehensive, accurate and interpretive account of how nurses translated their compassionate approach when providing virtual care in the context of primary care. The goal was to identify themes, recurrent patterns and commonalities among individuals, while considering variations between nurses.^{27,31}

Setting, participant and recruitment

Primary care nurses (i.e. registered nurses (RNs) and nurse practitioners (NPs)) working in rural and urban areas in Ontario and who had experience with virtual care technologies were recruited through convenience and snowball sampling strategies. RNs and NPs share common roles regarding, assessment, screening, health-related behaviors support, education, and chronic disease management.³² NPs are essentially RNs with additional educational training and extended scope of practice to diagnose, prescribe treatment, order and interpret clinical investigations, prescribe medication and perform certain medical procedures.³³ Participants were eligible if they had experience with virtual care, including videoconferencing, asynchronous messaging (e.g. email communication, text messaging), and remote patient monitoring. Study information was shared through emails sent to organizations (e.g. Women's College Hospital Family Practice), nurses in leadership positions in virtual care in Ontario (e.g. President of the Ontario Nursing Informatics Group, Clinical Informatics Practice Leader), and through social media networks (i.e. Twitter, LinkedIn, and Facebook).

Data collection

Sociodemographic information (e.g. age, sex, ethnicity, years of experience as a nurse, geography, frequency of virtual care use and level of competency in using virtual care), was collected prior to the interview. Individual qualitative semistructured interviews with nurses were conducted by members of the research team (KW, MDN, and GR) between May and October 2021. A fourth team member (RA) was also present on Zoom to take notes and observe a subset of interviews. This period of time occurred during the third and fourth waves of the COVID-19 pandemic, when virtual care was commonly utilized. Interview questions (Supplemental material 1) focused on understanding the perceptions of compassionate care, experiences of virtual care, and the intersections between compassionate care and virtual care. Participants were presented with a definition of compassionate care (i.e. awareness of another's experience or need, appraising one's own role and abilities in an interaction, and being aware of context).¹⁵ They were then asked if the definition resonated with their own perception of compassionate care. All interviews were conducted using an online video-conferencing platform (i.e. ZOOM), audio-recorded, anonymized, and transcribed verbatim by

a third-party. Participants were given a \$75 CAD electronic gift-card in recognition of their time to participate in the interview.

Data analysis

We followed five phases of a qualitative thematic analysis (see Figure 1).³⁴ In Phase 1, two team members (GR, KW) who conducted the interviews familiarized themselves with the data. Initial codes were generated in Phase 2. First, three team members (KW, MDN, and GR) read and independently generated codes for three transcripts. They then met to discuss these initial codes and organized them into a preliminary coding framework. Then, two team members (KW and GR) shared the transcript readings and coding, singly coding the remaining transcripts using NVivo 12 software³⁵ and documenting emerging thoughts and reflections. The team members met regularly to iteratively reflect on codes, define them, and merge related codes into commonalities and patterns. The coding framework was instrumental to the analytic process and allowed reflection on the entire data set. In Phase 3, codes were grouped together to generate preliminary (initial) themes arising from the data (inductive) and responding to the study objectives (deductive). One example of a data-driven theme was the changes in nurses' work processes induced by the delivery of virtual care. Our reflective analytic approach led us to intentionally focus on those data and relate them to (virtual) compassionate care. Miro,³⁶ a virtual whiteboard collaboration tool, was used to visually represent and identify relationships between the preliminary themes and as a debriefing strategy to facilitate reflection and discussion on the preliminary findings among research team

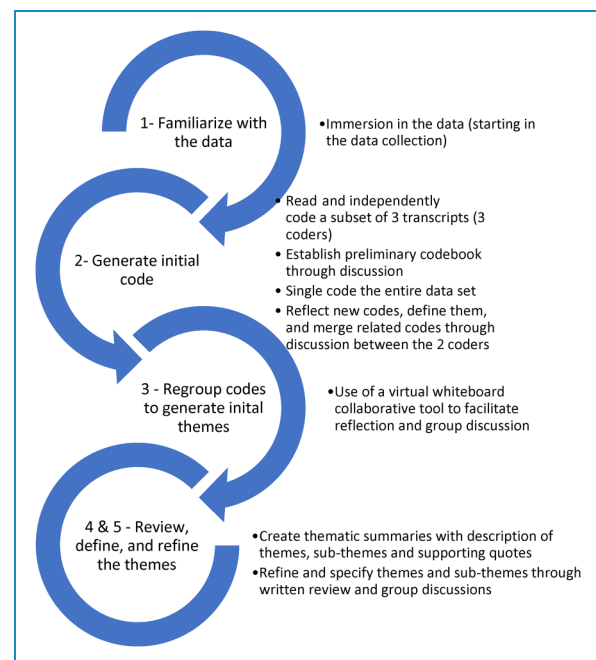


Figure 1. Data analysis process.

members. The ongoing and iterative process of phases 4 and 5 involved reviewing and defining themes. Themes and sub-themes were preliminarily named and defined in a thematic summary document, which was supported by key quotes and sent to research team members (i.e. authors). Refinements and specifications of themes, subthemes, and relationships between themes were determined through a series of in-depth discussions between all research team members (KW, GR, LD, LR, and MP).

We referred to the concept of *information power*³⁷ to support the rationale of the sample size of our study (rather than using the term “data saturation”). Information power means that the more information the study participants hold, the least amount of participants is required for the study. This consideration depends on the study aim (broad or narrow), the specificity (dense or sparse), the theory (applied or none), the quality of dialogue (strong or weak), and the strategy for analysis (case or cross-case). The aim of our study that was quite narrow and specific to primary care nurses who had experience in compassionate virtual care, therefore we were confident that a small sample size would provide a rich amount information.

Strategies to ensure trustworthiness

Researchers are “instruments” and interpreters in qualitative research. This means that they collect and analyze the data; bringing backgrounds, positionings (e.g. sociocultural, disciplinary), history, language and assumptions to the task of engaging with and analyzing the data and telling the story.³⁸ We employed mechanisms to interpret the data; defining what constituted the data, aligning the data to the research objectives, and portraying the findings to convey the meanings of the phenomenon across all participants.²⁸ Various strategies (e.g. peer debrief, researchers’ triangulation, documenting thoughts and reflections in various data analysis documents) were used to nurture reflexivity and ensure trustworthiness.³⁹ This also allowed for a certain degree of interpretation to discover the singular and collective meanings of how nurses experienced and provided compassionate virtual care. An audit trail consisting of four versions of the thematic summaries and meeting minutes with detailed discussions/decisions about consolidating codes and themes was kept.

Ethic approval

This study was formally reviewed by institutional authorities at Women’s College Hospital and was deemed not to require Research Ethics Board approval under the Assessment Process for Quality Improvement Projects pathway (APQIP) [# 2021-0028-P]. Participation in the project was voluntary. Verbal consent was obtained from each participant before the interview. Obtaining written consent was waived by the APQIP who endorsed verbal

consent as an acceptable approach when conducting online project. The study was a low-risk ethics concern.

Results

A total of 20 primary care nurses (two RNs and 18 NPs) participated in the study: all were female. Interviews lasted an average of 40 min. The sociodemographic characteristics of nurses are presented in Table 1.

Three themes are identified. The first theme identified that compassionate care is central to nursing practice; it is a foundational anchor to the discipline. The second theme identified that compassionate care evolves through virtual nurse-patient interactions (i.e. virtual care shifted the interactions, communication patterns, and nurses’ work flow). The third theme suggested nurses balanced their practice and patients’ expectations while delivering virtual compassionate care (i.e. focused on the barriers of delivering virtual compassionate care at organizational, professional, relational and individual levels).

Theme 1: Compassionate care is central to nursing practice

Participants described compassionate care as foundationally rooted in the nursing discipline, its “philosophy,” and how nurses were educated. When participants were presented with a definition of compassionate care, they identified with several key compassion-related elements that were aligned or complementary to the existing definition. Those elements are represented by three sub-themes: therapeutic relationships, holistic care and service-oriented and person-centered health care.

Subtheme 1.1: Therapeutic relationships. Nurses described building trust and respect as a pillar of compassionate care, which required creating safe environments so that patients felt open and comfortable in sharing experiences. It included expressing empathy and generating meaningful connections with patients. Participants highlighted the importance of generating a therapeutic patient–nurse relationship in a safe environment, in which trust, respect, empathy and feeling connected were included.

I think all of that hits it on the nose, and I think one of the **important things is empathy, being able to empathize with your patients** is, I think, important. I’m sure a lot of people wouldn’t agree with me. **But if you’re able to connect with the patient, you’re more likely to have a relationship with them in which they trust you and are willing to share more information with you. So, I think to be able to give compassionate care, you have to experience some compassion on your side—well, the practitioner side.** (NP7)

Table 1. Demographic characteristics for interview participants.

Characteristics	Participants (<i>n</i> = 20) <i>n</i> (%)
Age	
18–20	0 (0)
21–29	1 (5)
30–39	13 (65)
40–49	0 (0)
50–59	1 (5)
60+	1 (5)
Unidentified	4 (20)
Gender	
Woman	20 (100)
Ethnicity	
Black–African	1 (5)
East Asian	2 (10)
White European	14 (70)
Middle Eastern	1 (5)
Mixed heritage	1 (5)
South Asian	1 (5)
Geography	
Central East, Ontario	9 (45)
East, Ontario	1 (5)
West, Ontario	6 (30)
British Columbia	1 (5)
Unidentified	3 (15)
Years of practice	
<5	10 (50)
5–10	5 (25)
11–15	1 (5)
16+	3 (15)

(continued)

Table 1. Continued.

Characteristics	Participants (<i>n</i> = 20) <i>n</i> (%)
No response	1 (5)
Frequency virtual care	
Always ^a	11 (55)
Often ^b	4 (20)
Sometimes ^c	2 (10)
Rarely ^d	2 (10)
No response	1 (5)
Proficient virtual care	
Excellent ^e	9 (45)
Very good ^f	9 (45)
No response	2 (10)

^aUse virtual health technology in my practice everyday.^bUse virtual health technology in my practice 3+ times/week.^cSometimes use virtual health technology 1–3 times/week.^dRarely—use virtual health technology in my practice 1–3 times/month.^eExcellent—I know how to use virtual health technology without any assistance.^fVery good—I know how to use virtual health technology with little assistance.

Subtheme 1.2: Holistic care. Participants reflected on the alignment between compassion and holistic care; the latter described as treating the patient as a whole person, including their social determinants of health. Holistic care was emphasized as being central to providing appropriate nursing care. Participants perceived the nursing philosophy anchored in a health-focused perspective rather being disease or symptom-focused.

[Perception of compassionate care and nursing role]. It aligns pretty well. It's, like, I think nursing, like, I'm a nurse practitioner, so I'm sort of between the nursing world and the medical world, which I really enjoy, because I can provide them, like, all the medical care, at the same time, still using a nursing philosophy, which is compassionate care, right? **You help them from a holistic view, not just treat their illness, but also help them socially.** So, it aligns pretty well, yeah. (NP11)

Subtheme 1.3: Service-oriented and person-centered health care. Nurses described that compassionate care was anchored in a service-oriented and person-centered approach

to care. In practice, this would include offering the right care modality (“service-oriented”) that matched the patient’s context, lived experience, priorities, preferences, expectations, and things that mattered to them (“person-centered care”). Indeed, nurses also used terms such as “individualized” or “personalized” care (“person-centered care”). For some nurses, offering virtual care in addition to in-person consultation was perceived as compassionate because it increased access to care and extended healthcare service delivery options (“service-oriented”).

I think, seeing a patient on the screen, I think probably does provide more compassionate care, because I’m able to see them and they’re able to see me. So it’s the next best thing than be—it’s next best thing other than coming in person. So, if patients are eager for video visit, and we’re able to provide that, that’s compassionate care right there, in my mind. (RN13)

Theme 2: Compassionate care evolves through virtual nurse–patient interactions

This theme described how virtual care shifted the communication interactions between the nurse and the patient as well as the nurses’ work.

Subtheme 2.1: Virtual care shifts the way patients and nurses interact and establish relationships. Participants compared the face-to-face encounters with virtual care encounters. They shared whether and how compassion was demonstrated in video calls and in asynchronous messaging.

In-person visits were perceived to provide more opportunities to develop a relational connection by “feeding off” (NP5) the other person’s body language. Informal conversations and small-talk were described as easier and more spontaneous during in-person visits. Physical touch was highlighted as a tangible, compassionate action nurses could utilize during an in-person visit, which was not available in a virtual encounter. In contrast to in-person interactions, the nature of virtual communication was perceived as more formal, transactional, and problem-centred.

Video calls allowed for the reproduction of some interactive elements as they provided an opportunity to observe and respond to facial expressions and body language; a clear demonstration of attentive listening and presence. Nurses also perceived that video visits made patients feel more comfortable, likely because they were in a relaxed environment in which they could express themselves freely and safely from the comfort of their homes. Embedding compassion through asynchronous messaging (i.e. email) was described as challenging because of potential inferences of tone and interpretation of content. For some nurses, one-way asynchronous email communications used to send and receive information (e.g. bloodwork

requisitions, skin photos) were not central to creating a compassionate experience but could contribute to the quality of care because of their convenience and efficiency. Irrespective of the modality, enacting compassionate care in virtual interactions required developing or consolidating technological skills. If nurses didn’t feel comfortable using technology, their focus became the technology and not the patient, undermining their ability to focus on compassionate care.

I think therapeutic listening, active listening if you will, to engage in virtual care. I think feeling comfortable in the technology itself is beneficial, because then your focus doesn’t have to be on the tech side, it can actually be on providing that care that you want to, to the patient. And I think, at least initially during COVID, that was a huge focus, was again, going back to me being a beginner nurse, you’re so focused on the tasks, versus being there, and the patient. So, the compassion is there, but it’s not as heavy as if you’re able to autonomously function while seeing a patient on the screen and typing in their chart. When you get to that certain ability where you’re not as stressed about the tech side, I think the compassion would definitely increase, just because you’re able to focus more attention on that purely. (NP4)

Subtheme 2.2: Virtual care impacts what nurses do and how they do it. All nurses spoke said that virtual care changed the way they practiced, they acknowledged the opportunities and challenges of both virtual and in-person care. The shift to virtual care required nurses to expand their usual scope of data collection to include assessing patients’ digital literacy, care modality preferences, and resource access (e.g. technology, internet). They described the ability to adapt some clinical skills, for example, using the video as a demonstration, education, and observation tool to perform a physical examination. In contrast, some clinical activities required in-person visits, including specific physical and diagnostic examinations (e.g. pap test, bloodwork, blood pressure, abdomen palpation) and treatment and vaccine administrations. Some scenarios were possible both in-person or virtually, but the modality influenced the nature of the care provided. For example, breastfeeding support was described as easier in-person because the nurse could physically help the mother in repositioning the baby and providing reassurance. However, nurses were able to adapt their approach virtually by providing coaching, feedback, and sharing some cues with mothers through virtual interactions. Nurses also highlighted an unanticipated advantage of video visits that included additional insights gained by observing the patient’s living environment, which helped to inform an appropriate care plan.

With the digital health, being able to see your patient in their home environment, and listen to what’s going on,

and then also sort of take a look around. So, I've seen some hoarding situations that I never would have picked up on in their—in my office. Some living conditions that just floored me. But, again, when they come to the office, you don't learn those things about your patient, right? (NP12)

Theme 3: Nurses balance practice with patients' expectations when delivering virtual compassionate care

Participants highlighted interrelated contextual elements that influenced their ability to provide compassionate care that included practice expectations, tensions between providing quality and safe care, patients' expectations, and practice burnout.

Subtheme 3.1: Practice expectations. Practice structures (e.g. salary-funded model, practitioner-led clinic, fee for service) set the tone of how a workflow was enacted and organized. The allocated consultation time was largely prescribed by the practice structure and nurses found it challenging to provide appropriate and holistic care when working in practices with high patient volumes.

I would have to say, it's unfortunate, but **it's very dependent on which setting you are in and what the expectations of the setting are.** So, I've been in two major primary care organizations; one was in a practitioner-led clinic, and I was also in a leadership role, so I got to influence some of those pieces around how we see patients. And the models really, really matter. **So, the amount of time you are able to spend with another person will definitely affect how they feel connected to you, right, because at the end of the day, if patients or people don't feel connected to you, you know, why would they trust you, why would they take your recommendations, why would they follow your care plan?** (NP15)

Nurses described a shift in their workflow when balancing between in-person and virtual visits during the same day; they had to prioritize time and tasks between these two healthcare modalities, and allocate “tech time” for both nurses and patients to navigate technologies. In addition, technological issues disrupted the nursing workflow. These pressures and changes in workflow negatively impacted the ability to deliver compassionate care.

Subtheme 3.2: Tension between providing quality and safe care and meeting patients' expectations. Nurses were held accountable for maintaining high quality and safe care (i.e. standards of care) irrespective of the modality of care and as such nurses' decision-making was influenced by their sense of professional liability and regulations, and best practices. However, there was a tension between

maintaining standards of care and meeting patients' expectations for convenient access to care. On one hand, nurses felt pressured to offer the convenience of a virtual visit as demanded and expected by the patient, who often want to be seen only virtually for prescription renewals and addressal of symptoms. On the other hand, nurses felt worried about compromising quality and safety. When restricted to the virtual environment, nurses were not able to make the necessary physical health assessments, and consequently describe feeling worried about not having sufficient information to make confident diagnoses or determine optimal treatment plans and prescriptions. The worry is for the patient as well as for their personal and professional liability.

They couldn't get into their doctors office, they didn't want to go out to a walk in clinic. And I had to say, **'Well we need to be safe, this is for your safety.** It's not like I can just hand you a cream, meanwhile there's something more going on.' So, yeah sometimes I've had a few scenarios where the feedback is not, it's not what they want to hear. **Or the limitations of prescribing, that we do not prescribe narcotics for controlled substances virtually, and this patient is looking for that. So sometimes we do get some patients who feel that they are not being heard, and this is a concern. This is what they know will make them feel better. But the limitations of virtual care won't allow us to provide it.** (NP7)

Nurses needed to establish, negotiate, and communicate expectations with patients. Indeed, nurses communicated the need for an in-person consultation when health assessment was required, which was aligned with their standard of practice. However, some patients wanted to be seen virtually, and asked for virtual prescriptions and blood tests without an in-person visit. Nurses struggled to maintain balance when they felt an in-person visit was warranted to maintain a standard of practice (i.e. avoid misdiagnosis) when the patient wanted a virtual visit. There was an imbalance in practice structure and patient expectations.

Subtheme 3.3: Experienced burnout. Nurses unanimously described burnout that affected their capacity to provide compassionate care. They attributed burnout not only to the pandemic but to the intersection of the contextual pressures described above—the tensions between practice structure (i.e. liability concerns) and patient expectations.

In comparison, I think a lot of nurse practitioners—I can't speak for physicians—but I think a lot of nurse practitioners feel a sense of moral distress **when they work in a high-volume practice**, where the expectation is for them to see—and I feel this way now a little bit—is to see twenty patients, or twenty-five patients in a day instead of twelve, which is more appropriate, which would be half

an hour per patient. And then you have two sides of that; do you spend that time to provide this holistic, comprehensive, compassionate care and then just run behind all day, right, which leads to other problems? **People are waiting, people are upset about waiting, all those things. Or do you just try to stick to the bookings, but then have this moral distress? And that's what we hear a lot in our profession and primary care, that people feel more of a stress because of the expectations of the practice.** (NP15)

Participants also perceived a lack of respect, demonstrated by virtual appointment “no shows.” The depersonalization of virtual care compared to in-person care was highlighted and related to the absence of physical touch, which was considered as “basic human things” (NP14). It was more difficult for nurses to be empathic and invest in relationship-building because they felt overwhelmed and disconnected from the ability to provide high-quality care. However, when nurses felt the reciprocity, the gratitude as expressed by their patients, and an improvement of their situation because of the nursing care they provided, this impacted positively the delivery of compassionate care.

Discussion

This study explored how nurses perceived and operationalized compassionate care in primary care practice settings. Three main insights emerged: (1) while there was agreement in the core elements of compassionate care among nurses, competing orientations to care between participants introduced variability in whether and how compassionate care was enacted; (2) virtual care required an evolution in how nurses worked, with implications for an adequate skill set, and (3) the way the healthcare system was structured and regulated influenced the degree to which compassionate care could be fully realized.

Nurses identified intersecting and interrelated elements—therapeutic relationships, holistic care, person and service-orientations to care—as both related to compassion and core to the nursing profession.^{24,40,41} Person-centered care⁴² (i.e. patients are treated in their uniqueness with their specific needs) was sometimes in tension with service-oriented care (focused on offering medically appropriate, timely, safe, and accessible health care). For example, there was a disconnect between what nurses believed to be best for the patient's health (e.g. in-person physical assessment) and what patients valued (e.g. convenience provided by virtual interactions). This tension occurred in a practice structure that could impede compassionate care (e.g. one that is time-based and prioritized high volumes), underscoring the need for a multilevel approach. Greene, Tuzzio and Cherkin⁴³ articulate a (new) multidimensional conceptualization of patient-centered care in which interpersonal/patient-provider attributes (e.g. empathic communication tailored to patient's needs),

clinical (e.g. shared-decision making, accommodation of in-person and virtual visits), and structural (e.g. access to care) influence patient's experience. These attributes are seen as a “system property” because they interact with each other and offer a comprehensive, and integrative perspective of a patient-centered health system.⁴³ This perspective may help alleviate identified tensions between person-centred and service-oriented care.

Nurses in our study needed focused training to support the ability to translate compassionate behaviors in virtual interactions. Based on our findings and supported by the literature,^{44,45} training must build technological skills, relational skills, clinical skills, and management skills (e.g. planning and organizing practice to make physical and virtual visits with patients work). Possible interventions to support the delivery of virtual compassionate care could include organizational interventions aimed to foster compassionate care with positive impacts on empathy, compassionate practices with colleagues and patients, reduced isolation, supported teamwork, communication, and individual and team relational capacity.^{46–48} For example, Schwartz Center Rounds[®] (Rounds) are monthly group meetings implemented in more than 100 organizations around the world. They are designed to support healthcare providers to deliver compassionate care by creating space to reflect on work and facilitate group discussion.⁴⁷ Participation in Rounds[®] has increased “empathy, compassion, peer support, reflection, work engagement and communication with patients,⁴⁷” and these are now being delivered virtually.^{49,50} Rounds[®] can be a great platform in which compassionate care could be discussed, particularly when delivered in a virtual context. At a system-level, a unified and integrated system of physical and virtual primary care services is needed to avoid further fragmentation⁵¹ that would create a myriad of incompatible workflows. For example, National Health Service England's Long Term Plan⁵² has been launched to better integrate virtual and physical primary care services. It aims to give all patients access to virtual primary care services, maintain connections with primary care providers, support healthcare providers in the adoption of virtual platforms, and propose a national framework for virtual suppliers to make their services accessible.

The rapid deployment of virtual care required nurses to pivot their practice, role, and workload within an emerging service delivery model, while simultaneously evolving their practice within an embedded primary care model. While four Canadian practice guidelines for nurses to deliver virtual care have been developed,^{53–56} the word “compassionate” appears in only two guidelines,^{54,56} with other related terms that include “therapeutic nurse–client relationship,”⁵⁴ “client centered,” and “comprehensiveness of the care.”⁵⁶ Furthermore, the terms “compassion” or “compassionate care” are not reflected in national competencies for nurses in primary care⁵⁷ or informatics competencies for

nurses leaders.⁵⁸ This is absolutely paradoxical given that compassion is a core tenant of nursing.⁴⁰ One potential explanation of this inconsistency might be that the contributions of primary care nurses in virtual models of primary care remains unclear,⁵⁹ precluding the ability to articulate underlying compassionate competencies. However, other compassion-related elements are named such as “patient-centered,” “respectful and supportive communication,” “professional relationship,”⁵⁷ and “interpersonal/soft skills.”⁵⁸

Our findings also highlight the critical and widespread implications of burnout among nurses. While established drivers of burnout include personal (e.g. values, sex, roles and relations) and work-related (e.g. workload, work environment, job demands) factors, organizational culture and values, social support, and community at work,⁶⁰ our results highlight the importance of the perceived level of respect or value patients place on the time and care provided by nurses. Findings from a systematic review indicated that nurses who provided care during the COVID-19 pandemic experienced moderate and high level of burnout.⁶¹ Binnie et al.⁶² conducted a cross-sectional study among Canadian healthcare workers exposed to patients with COVID-19 in intensive care units. They reported high psychological distress levels of those workers (64.5%). Nurses experienced more distress (75.7%) than physicians (49.4%). However, the phenomenon of nursing burnout is not new and it is well described in the nursing literature.^{61,63–65} Burnout can result in deleterious consequences on nurses’ quality of life, quality and safety of nursing care, job performance, adverse events, patient negative experience, and medication errors.^{63,64} The Registered Nurses’ Association of Ontario⁶⁶ suggest interventions to prevent and mitigate nurse fatigue would fall into three categories: external/system (e.g. allocating funding to create physical infrastructure aimed to support rest areas for nurses during breaks), organizational (e.g. offering fatigue prevention and management programs such as wellness initiatives within the organization), and team/Individual (e.g. maintaining healthy behaviors such as physical activity, adequate nutritional intake). Future work is needed to move beyond individual interventions (e.g. mindfulness and psychosocial training, communication skills training, yoga⁶⁷) to understand the system-level interventions that could effectively reduce and mitigate burnout.

Limitations

There are several limitations to this study. First, participants in this study were all female nurses and predominantly NPs, underscoring a need to validate whether and how the experiences of male nurses and RNs are similar or different. Second, participants were provided with a preliminary definition of compassionate care which may have influenced their perspectives. A more open-ended approach to defining

and conceptualizing compassion may have yielded more nuanced insights. Given the interpretive description approach to this study, participants appeared to share complementary perceptions about compassionate care. This data-driven approach justified the importance of regrouping conceptualizations into a single theme. Third, the realities of the pandemic and the related requirements for online recruitment were challenging. Fourth, the perspectives gained from these RNs and NPs reflect an early implementation phase of virtual care, which may not reflect current experiences. However, this does provide a basis for future research. Fifth, the interview guide was not pilot-tested with nurses but was adopted from a related study that examined compassionate virtual care from the perspective of primary care physicians.¹⁹ Finally, understanding experiences of providing compassionate care in a virtual context was limited to participant self-report. Using observations during virtual interactions would be a complementary approach to validate and expand these findings, as well as understand the role of the therapeutic relationship in creating compassionate care experiences.

Conclusions

The findings of our study highlight an opportunity to better align nurses’ understanding and operationalization of compassionate care in virtual primary care contexts. Exploring how compassionate care is operationalized in primary care settings is a necessary first step to building compassionate competencies across the nursing profession to support the continued virtual evolution of health service delivery. Nurses as providers and recipients of compassionate care⁶⁸ need to cultivate their well-being because they are at risk of burnout, which can negatively affect themselves and their patients. The findings of this study present a “Call to Action” to better understand the broader virtual primary context in which nurses practice. This includes identifying best practice guidelines and compassion competencies to structure scope of practice in virtual care environments and to reconcile the tensions influencing how nurses practice, including system, service and patient-orientations to providing care.

Acknowledgements: We are grateful to all the nurse participants who took their time to participate in our study in the mid of COVID-19 pandemic pressures. We would also like to thank Marlena Dang Nguyen, Rhea Azavedo, and Diya Srinivasan for their support in data collection and in the early iterations of the data analysis.

Contributorship: GR acquired, analyzed, and interpreted the data, drafted the manuscript, revised it and wrote the submitted version. LD conceived, designed, and supervised the study, contributed to data interpretation, revised the manuscript. KW acquired, analyzed, and interpreted the data, helped to draft the

manuscript. MP and LR contributed to data interpretation and revised the manuscript. All authors revised substantively the manuscript and approved the final manuscript.

Declarations conflicting interests: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics approval: This study was formally reviewed by institutional authorities at Women's College Hospital and was deemed not to require Research Ethics Board approval under the Assessment Process for Quality Improvement Projects pathway (APQIP # 2021-0028-P). Participation in the study was voluntary. Verbal consent was obtained from each participant before the interview. The study was a low risk ethics concern.

Funding: This project has been funded through Associated Medical Services Inc. (AMS) Fellowship in Compassionate Care and Artificial Intelligence provided to LD. GR received postdoctoral funding from Fonds de recherche du Québec—Santé. The funding organizations did not influence the design, collection, analysis and interpretation of data, the writing of the paper, nor the decision to submit the paper for publication.

Guarantor: GR.

ORCID iD: Geneviève Rouleau  <https://orcid.org/0000-0003-1093-6577>

Supplemental material: Supplemental material for this article is available online.

References

- Crawford P and Brown B. Fast healthcare: brief communication, traps and opportunities. *Patient Educ Couns* 2011; 82: 3–10.
- Crawford P, Brown B, Kvangarsnes M, et al. The design of compassionate care. *J Clin Nurs* 2014; 23: 3589–3599.
- Glazier RH, Green ME, Wu FC, et al. Shifts in office and virtual primary care during the early COVID-19 pandemic in Ontario, Canada. *CMAJ* 2021; 193: E200–E210.
- Bhatia RS, Chu C, Pang A, et al. Virtual care use before and during the COVID-19 pandemic: a repeated cross-sectional study. *CMAJ Open* 2021; 9: E107–E114.
- Women's College Hospital Institute for Health Systems Solutions and Virtual Care. *Virtual care: a framework for a patient-centric system*. Toronto, Canada: Women's College Hospital, 2014.
- De Vera K, Challa P, Liu RH, et al. Virtual primary care implementation during COVID-19 in high-income countries: a scoping review. *Telemed E-Health* 2022; 28: 920–931.
- Breton M, Deville-Stoetzel N, Gaboury I, et al. Telehealth in primary healthcare: a portrait of its rapid implementation during the COVID-19 pandemic. *Healthc Policy* 2021; 17: 73–90.
- Wiljer D, Strudwick G and Crawford A. Caring in a digital age: exploring the interface of humans and machines in the provision of compassionate healthcare. In: Hodges BD, Paech G and Bennett J (eds) *Without compassion, there is no healthcare Leading with care in a technological age*. Montreal, Quebec, Canada: McGill - Queen's University Press, 2020, pp.33–77.
- Martimianakis MA, Khan R, Stergiopoulos E, et al. Toward compassionate healthcare organizations. In: Hodges BD, Paech G and Bennett J (eds) *Without compassion, there is no healthcare: compassionate care in a technological world*. Montreal, Quebec, Canada: McGill-Queen's University Press, 2020, pp.171–190.
- Sinclair S, Hack TF, Raffin-Bouchal S, et al. What are health-care providers' understandings and experiences of compassion? The healthcare compassion model: a grounded theory study of healthcare providers in Canada. *BMJ Open* 2018; 8: e019701.
- Clayton AR. How 'person-centered' care helped guide me toward recovery from mental illness. *Health Aff (Millwood)* 2013; 32: 622–626.
- Dempsey C. The impact of compassionate connected care on safety, quality, and experience in the age of COVID-19. *Nurse Lead* 2021; 19: 269–275.
- Sinclair S, McClement S, Raffin-Bouchal S, et al. Compassion in health care: an empirical model. *J Pain Symptom Manage* 2016; 51: 193–203.
- Kemp J, Zhang T, Inglis F, et al. Delivery of compassionate mental health care in a digital technology-driven age: scoping review. *J Med Internet Res* 2020; 22: e16263.
- Goetz JL and Simon-Thomas E. The landscape of compassion. In: EM Seppälä and (eds) *The Oxford handbook of compassion science [Internet]*. 2017, pp.3–16. DOI: 10.1093/oxfordhb/9780190464684.013.1.
- Wiljer D, Charow R, Costin H, et al. Defining compassion in the digital health age: protocol for a scoping review. *BMJ Open [Internet]* 2019; 9: e026338.
- Wu K, Dang Nguyen M, Rouleau G, et al. Understanding how virtual care has shifted primary care interactions and patient experience: A qualitative analysis. *J Telemed Telecare* 2023; 1357633X231167905.
- Andreadis K, Muellers K, Ancker JS, et al. Telemedicine impact on the patient-provider relationship in primary care during the COVID-19 pandemic. *Med Care. avr* 2023; 61(4 Suppl 1): S83–S88.
- Desveaux L, Wu K, Rouleau G, et al. Building compassionate experience through compassionate action: qualitative behavioral analysis. *JMIR Form Res* 2023; 7: e43981.
- Haggerty JL, Reid RJ, Freeman GK, et al. Continuity of care: a multidisciplinary review. *Br Med J* 2003; 327: 1219–1221.
- Haggerty J, Burge F, Lévesque JF, et al. Operational definitions of attributes of primary health care: consensus among Canadian experts. *Ann Fam Med* 2007; 5: 336–344.
- Royal College of Physicians and Surgeons of Canada. *CanMEDS: better standards, better physicians, better care [Internet]*, <https://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e> (2018, accessed 28 January 2022).
- College of Nurses of Ontario. *Entry-to-practice competencies for Ontario registered practical nurses [Internet]*, https://www.cno.org/globalassets/docs/reg/41042_entrypracrp-n-2020.pdf (2019).

24. Ali S, Kleib M, Paul P, et al. Compassionate nursing care and the use of digital health technologies: a scoping review. *Int J Nurs Stud* 2022; 127: 104161.
25. Tong A, Sainsbury P and Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007; 19: 349–357.
26. Thome S. *Interpretive description: qualitative research for applied practice*. 2nd ed. New York, NY, US: Routledge, 2016, p.334.
27. Thorne S, Kirkham SR and MacDonald-Emes J. Interpretive description: a noncategorical qualitative alternative for developing nursing knowledge. *Res Nurs Health* 1997; 20: 169–177.
28. Thorne S, Kirkham SR and O’Flynn-Magee K. The analytic challenge in interpretive description. *Int J Qual Methods* 2004; 3: 1–11.
29. Braun V and Clarke V. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qual Res Psychol* 2021; 18: 328–352.
30. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health* 2000; 23: 334–340.
31. Hunt MR. Strengths and challenges in the use of interpretive description: reflections arising from a study of the moral experience of health professionals in humanitarian work. *Qual Health Res* 2009; 19: 1284–1292.
32. Canadian Nurses Association. *Role description [Internet]*, <https://www.cna-aiic.ca/en/nursing/nursing-tools-and-resources/primary-care-toolkit/pct-role-description> (n.d.).
33. Canadian Nurses Association. *Nurse practitioners [Internet]*, <https://www.cna-aiic.ca/en/nursing/advanced-nursing-practice/nurse-practitioners> (n.d.).
34. Braun V and Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
35. QSR International Pty Ltd. *NVivo (Version 12) [Internet]*, <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home> (2018).
36. Khusid A. *Miro: The leading visual collaboration platform [Internet]*, www.miro.com (2023).
37. Malterud K, Siersma VD and Guassora AD. Sample size in qualitative interview studies: guided by information power. *Qual Health Res* 2016; 26: 1753–1760.
38. Oliver C. The relationship between symbolic interactionism and interpretive description. *Qual Health Res* 2012; 22: 409–415.
39. Nowell LS, Norris JM, White DE, et al. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods* 2017; 16: 1609406917733847.
40. Feo R, Kitson A and Conroy T. How fundamental aspects of nursing care are defined in the literature: a scoping review. *J Clin Nurs* 2018; 27: 2189–2229.
41. Nagel DA and Penner JL. Conceptualizing telehealth in nursing practice: advancing a conceptual model to fill a virtual gap. *J Holist Nurs* 2016; 34: 91–104.
42. Kwame A and Petrucka PM. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward. *BMC Nurs* 2021; 20: 158.
43. Greene SM, Tuzzio L and Cherkin D. A framework for making patient-centered care front and center. *Perm J* 2012; 16: 49–53.
44. Brice S and Almond H. Health professional digital capabilities frameworks: a scoping review. *J Multidiscip Healthc* 2020; 13: 1375–1390.
45. Nazeha N, Pavagadhi D, Kyaw BM, et al. A digitally competent health workforce: scoping review of educational frameworks. *J Med Internet Res* 2020; 22: e22706.
46. Bridges J, May C, Fuller A, et al. Optimising impact and sustainability: a qualitative process evaluation of a complex intervention targeted at compassionate care. *BMJ Qual Saf* 2017; 26: 970–977.
47. Maben J, Taylor C, Dawson J, et al. A realist informed mixed-methods evaluation of Schwartz center rounds® in England. *Health Serv Deliv Res* 2018; 6: 1–260.
48. Hall I and Nelligan M. Helping nurses reconnect with their compassion. *Nurs Times* 2015; 111: 21–23.
49. Abnett H, Tuckwell R and Evans L. Early introduction of the multi-disciplinary team through student Schwartz rounds: a mixed methodology study. *BMC Med Educ* 2022; 22: 523.
50. The Schwartz Center for Compassionate Healthcare. *The Schwartz Center. Virtual Schwartz Rounds*, <https://www.theschwartzcenter.org/programs/virtual-schwartz-rounds/> (accessed 10 July 2023).
51. Wharton GA, Sood HS, Sissons A, et al. Virtual primary care: fragmentation or integration? *Lancet Digit Health* 2019; 1: e330–e331.
52. NHS England. *NHS England » A five-year framework for GP contract reform to implement the NHS long term plan [Internet]*, <https://www.england.nhs.uk/publication/gp-contract-five-year-framework/> (accessed 31 December 2022).
53. College of Nurses of Ontario. *Telepractice: practice guideline. [Internet]*, <https://www.telemedecine-360.com/wp-content/uploads/2019/03/2017-CNO-Nursing-Telepractice-guidelines.pdf> (2020, accessed 28 December 2022).
54. Nova Scotia College of Nursing. *Telenursing practice guideline for nurses [Internet]*, <https://www.nscn.ca/professional-practice/practice-support/practice-support-tools/telenursing/> (2023, accessed 3 January 2024).
55. Nurses Association of New Brunswick. NANB. *Practice guideline: telenursing practice*, <http://www.nanb.nb.ca/media/resource/NANB-PracticeGuideline-Telenursing-July20-E.pdf> (2020, accessed 28 December 2022).
56. College of Registered Nurses of Newfoundland & Labrador. CRNNL. *Virtual nursing practice*, <https://crnnl.ca/practice/practice-resources/practice-topics/virtual-nursing-practice/> (2020, accessed 28 December 2022).
57. Lukewich J, Allard M, Ashley L, et al. National competencies for registered nurses in primary care: a delphi study. *West J Nurs Res* 2020; 42: 1078–1087.
58. Strudwick G, Nagle L, Kassam I, et al. Informatics competencies for nurse leaders: a scoping review. *JONA J Nurs Adm* 2019; 49: 323.
59. Vaughan C, Lukewich J, Mathews M, et al. Nursing contributions to virtual models of care in primary care: a scoping review protocol. *BMJ Open* 2022; 12: e065779.
60. McGrath K, Matthews LR and Heard R. Predictors of compassion satisfaction and compassion fatigue in health care workers providing health and rehabilitation services in rural and remote locations: A scoping review. *Aust J Rural Health* 2022; 30: 264–280.

61. Zareei M, Tabanejad Z, Oskouie F, et al. Job burnout among nurses during COVID-19 pandemic: a systematic review. *J Educ Health Promot* 2022; 11: 107.
 62. Binnie A, Moura K, Moura C, et al. Psychosocial distress amongst Canadian intensive care unit healthcare workers during the acceleration phase of the COVID-19 pandemic. *PloS One* 2021; 16: e0254708.
 63. Khatatbeh H, Pakai A, Al-Dwaikat T, et al. Nurses' burnout and quality of life: a systematic review and critical analysis of measures used. *Nurs Open* 2022; 9: 1564–1574.
 64. Dall'Ora C, Ball J, Reinius M, et al. Burnout in nursing: a theoretical review. *Hum Resour Health* 2020; 18: 41.
 65. Sullivan D, Sullivan V, Weatherspoon D, et al. Comparison of nurse burnout, before and during the COVID-19 pandemic. *Nurs Clin North Am* 2022; 57: 79–99.
 66. Registered Nurses' Association of Ontario. *Preventing and mitigating nurse fatigue in health care [Internet]*, <https://rnao.ca/bpg/guidelines/preventing-and-mitigating-nurse-fatigue-health-care> (2011, accessed 31 December 2022).
 67. Aryankhesal A, Mohammadibakhsh R, Hamidi Y, et al. Interventions on reducing burnout in physicians and nurses: a systematic review. *Med J Islam Repub Iran* 2019; 33: 77.
 68. Maunder RG, Chaukos D and Lawson A. Healthcare workers as recipients of compassion: resilience, burnout, and relationship. In: Hodges B, Paech G and Bennett J (eds) *Without compassion, there is no healthcare: compassionate care in a technological age*. Montreal, Quebec, Canada: McGill-Queen's University Press, 2020, pp.105–123.
-