



Research Article

Impact of COVID-19 on Primary Care: Addressing Health Concerns and Patient Experience of Virtual Care

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Abstract

Introduction: During the height of the pandemic, primary care clinics were shuttered or only seeing urgent cases. Virtual consultations were adopted to ensure patients had their health concerns met. This study sought to explore the primary care experiences of older adult patients during the COVID-19 pandemic, specifically the impact of COVID-19 on the ability of older patients' ability to have their non-COVID-19 health needs addressed, and older patients' specific experiences with virtual care.

Methods: Qualitative interviews were conducted over Zoom or telephone and followed an investigator-designed semi-structured interview guide. Interviews were recorded and transcribed verbatim. Thematic analysis was used to make sense of and interpret the data.

Findings: Twenty-nine participants (average age 68 years) participated in the study. Participants indicated that they were able to have their health needs addressed despite COVID-19 impacted how primary care was delivered. Impacts included physicians being more rushed, not taking time with new medical concerns in some cases and creating a sense of fear and doom with the strict protocols in place to mitigate the spread of COVID-19. Virtual care was generally well-received by participants, with some exceptions. Advanced age and difficulties with hearing were two of the main reasons for poor experiences with virtual care.

Conclusions: Overall, patients in this Study were able to have their health needs addressed. Tailoring virtual care to either phone or videoconferencing for those who have cognitive or sensory impairments, language barriers, or poor connections (and who many need to see non-verbal cues or read lips) is important.

Keywords: COVID-19; Primary care; Virtual Care; Older adults

Patient Contribution: The findings and reflections presented are drawn from perspectives shared by 29 older adult patients in semi-structured interviews.

Introduction

Primary care providers have become increasingly concerned about the potential disruption and/or limitation to routine care of chronic conditions as a result of COVID-19 [1-4]. The use of virtual care (VC) has been an unavoidable feature of primary care services during the pandemic in order to continue to meet patients' health needs [5]. VC 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" [6]. Some studies have found benefits to virtual care during the pandemic, however, it has not been without its challenges for primary care practitioners [1,4,7].

Patients also experienced challenges with VC, particularly older adults (55 years and older). Not only does research show that older patients prefer personal contact with their health professional [8,9], but those with sensory challenges (e.g., hard of hearing) are likely to have some difficulty following information presented in a virtual consultation format [10,11]. Beyond specialty care, little is known about the experience of providing virtual primary care to older adults, particularly during COVID-19 [12].

The purpose of this exploratory qualitative study is to explore the primary care experiences of older adult patients during the COVID-19 pandemic. Specifically, this study seeks to understand: (1) The impact of COVID-19 on the ability of older patients' ability to have their non-COVID-19 health needs addressed, and; (2) Older patients' specific experiences with virtual care.

Methods

Study Design

This inquiry used an exploratory-descriptive qualitative (EDQ) design using purposive sampling and semi-structured interviews. EDQ has been noted as being an appropriate approach to health research when the topic under investigation has been minimally studied [13], and when researchers want to understand participants' experience with what is working and what is not [14]. Two research questions guided our approach: (1) How did COVID-19 impact older adult patients in having their non-COVID-19 health needs addressed by their primary care provider? and; (2) What were the experiences of older adult patients in accessing virtual care to have their health needs addressed?

Sample

The study population included adults in a large western Canadian city. We limited the study population to those 55 and older due the lack of literature focused on older adults' experiences with accessing remote care [9,11]. 29 participants were recruited for the study. The inclusion criteria included: (1) participants were 55 years or older and (2) living in the city for two plus years (3) had seen a primary care provider since March 2020 for non-COVID-19 related health concerns. All participants were located in various areas of the city and accessed a variety of primary care practitioners.

Recruitment

Researchers engaged with a local company specializing in recruitment for qualitative studies, as well as sending emails to several primary care practitioners informing them of the study and asking them to make available the recruitment information to patients who met the inclusion criteria. Participants contacted researchers letting them know of their interest to participate in the study. As part of an ethical recruitment strategy, participants were informed that they could opt out anytime during the study and that their willingness to participate would not impact their quality of care.

Interviews were conducted over Zoom or telephone and followed the semi-structured interview guide (see Appendix 1). Interviews were audio-recorded and transcribed verbatim. All transcripts were loaded into Dedoose, (see <https://www.dedoose.com/>) a web-based platform for analyzing qualitative research. This study was approved by the University's Conjoint Health Research Ethics Board (REB20-0959_MOD5).

Appendix 1. Interview Questions

The aim of this interview is to understand the patient's experience of primary care during the COVID-19. It is important to understand who is providing the care to the patient throughout, as well as how (i.e., virtual). We want to understand how, if at all, COVID-19 impacted the accessibility and quality of primary care.

Q1: Do you have a family doctor or nurse practitioner who you regularly go to for care? [If yes, continue on to other questions below. If not, go to non-connected patient interview guide].

Patient Interview Guide [connected to family doctor]:

Q1FU1: About how long have you had that care provider? (i.e., approx. how many years or months or weeks)

Q2. Can you tell me about your experience accessing care from your family doctor or nurse practitioner over the past eighteen months?

Q2FU1: Who did you receive care from?

Q2FU2: What kind of care did you receive? (e.g., chronic disease management, new concern, etc.)

Q2FU3: How did you receive care? [e.g., in-person, virtual, hybrid of both?] What was that like for you? [liked it, did not like it, why]

Q2FU4: Were there issues that came up for you that weren't addressed? Why were they not addressed?

Q2FU5: Where there any other issues that came up for you over the COVID-19 pandemic, like mental health concerns or anxiety? Did you talk to your primary care provider about those? [if yes, what was that like. If no, why not]

Q3: How was the quality of care that you received? What about it made it good/bad to you? (note to interviewer: if patient received care in multiple ways, ask participant to speak to each way separately - in-person vs. virtual/phone vs. hospital, etc.)

Q3FU1: Can you tell me about any frustrations you experienced as part of your healthcare journey over the past 18 months?

Q3FU2: Were there any health concerns that you didn't address during this last 18 months? What were the reasons for that?

Q4: Based on your experience, is there anything you want primary care providers (e.g., family doctors/nurse practitioners) to know?

Q4FU1: Is there anything you'd like them to have done differently?

Non-Connected Patient Interview Guide [not connected to family doctor]:

Q1. Over the past 18 months, did you need to access a clinic or doctor for any health-related issues?

Q1FU1: If yes, how did you receive that care? (e.g., in-person at a clinic, virtual/phone, elsewhere?)

Q1FU2: If yes, did you receive that care from a family doctor or somebody else, like nurse practitioner? (note to interviewer: adapt accordingly if patient does not have a family doctor)

Q1FU3: How did you receive care? [e.g., in-person, virtual, hybrid of both?] What was that like for you? [liked it, did not like it, why]

Q1FU4: Were there issues that came up for you that weren't addressed? Why were they not addressed?

Q2: How was the quality of care that you received? What about it made it good/bad to you? (note to interviewer: if patient received care in multiple ways, ask participant to speak to each way separately - in-person vs. virtual/phone vs. hospital, etc.)

Q2FU1: Can you tell me about any frustrations you experienced as part of your healthcare journey over the past 18 months?

Q2FU2: Were there any health concerns that you didn't address during this last 18 months? What were the reasons for that?

Q2FU3: Where there any other issues that came up for you over the COVID-19 pandemic, like mental health concerns or anxiety? Did you talk to a health care primary care provider about those? [if yes, what was that like. If no, why not]

Q3: You had mentioned you did not have a family doctor. Have any of the clinics offered to set you up with one? [If yes, ask how they got attached. If no, ask if they would like to get a regular family doctor/challenges with getting attached].

Q4: Based on your experience, is there anything you want primary care providers (e.g., family doctors/nurse practitioners) to know?

Q4FU1: Is there anything you'd like them to have done differently?

Analysis

The qualitative data for this project were analyzed using thematic analysis, going through phases of the analytical process as outlined by Braun and Clarke (2006) [15]. Thematic analysis is a research method for identifying, analyzing and reporting themes in qualitative data. Each researcher conducted an initial reading of the transcripts, who took notes on emerging ideas from that reading. Codes were then developed based on interesting features in data (e.g., relation to research questions) as well as through key findings from the literature review as related to the interview data. Themes were then shared and discussed between the researchers to ensure the themes made sense in relation to what was heard in data collection. Themes were then further analyzed within the context of the study aims prior to finalizing.

Findings

In total, there were 17 women and 12 men. The average age of the participants was 68, with the youngest participant being 55 and the oldest being 87 years old. A small number of participants had only high school degrees (n=7), while more than half of the sample (n=19) had some form of post-secondary education (i.e., technical school, college or university). Another small percentage of the sample (n=3) had graduate degrees.

Table 1 outlines the themes and sub-themes identified in the data that are explored in greater detail below.

Objective	Theme	Subtheme	Example Quotation
Impact of COVID-19 in ability of older patients' to have health needs addressed	Limited impact in having health needs fully addressed	Understood there would be changes in care due to the pandemic	No I found I was quite ok. I got to the end of the day and thought “You know I really have to look after this. There’s something not quite right here.” I would just call them and say if it would be ok if I pop in and more often than not they were very accommodating [P010].
		Extra measures taken to ensure patient safety	Every place I’ve gone they’ve had restrictions in the waiting room and visitors and non-patients and it’s all well cared for, well looked after and easy to understand what they want. They’ve both done a good job posting signs that explain things when you walk in, what the procedures are. Watch other people come in that weren’t aware if they had issues with language, they couldn’t read for example, they’d explain to them and they understood so. [P009]
	Frustrations with having health needs addressed	Primary care physician overworked	No, I guess she’s [doctor] yeah, I guess overwhelmed too you know? [P28]
		Reduced office hours	No there were a couple of time when it first started and you know, basically, they closed down their practices. They did telephone calls. Which is ridiculous because she would phone my work phone number... [P012]
		COVID-19 mitigation efforts contributed to sense of doom	I went to the clinic and they had a few chairs, and they asked some people to stand outside. The chairs were like 6 feet apart or something. So it was kind of uncomfortable. You were concerned that you were going to catch something. You know, like there was that fear factor that was put into it [P012].
	Older patients’ experiences with virtual care during COVID-19	Positive experiences with virtual care	Patient-physician history and relationship critical variable to positive virtual care experiences
Virtual care comprehensive and accessible			The next time was for my annual. So we scheduled the call and I don’t know, whatever time it was scheduled for, 11am, she called me at 11am and it was very much on time. [P004]
Challenges with virtual care		Virtual care impacts quality of care	The question needs to be asked ‘are you comfortable with a phone call or online consult or is it something you would feel more comfortable coming in [person] and discussing. Because you’re not comfortable with this. [P004]
		Issues that impacted comfort with and confidence in virtual care (e.g., auditory, cognitive, etc.)	Not having to reiterate what I am saying, yeah...that’s part of the echo thing too is because I am trying to speak and you know, I may not actually be finished my thought when he’s repeating back what I am saying so then it’s like, almost like an echo. [P005]

Table 1: Themes: COVID-19 Impact in addressing health concerns and patient experience of virtual care

Patients' having their health needs addressed during the pandemic

Twenty-two respondents expressed they were able to have their health needs met during the pandemic and felt that despite the challenges COVID-19 presented, their primary care physicians were able to provide high-quality care. Participants stated that their physicians "were doing a good job" and were reasonably accommodating under the general public health guidelines. In general, participants recognized that the health care they received in primary care settings was impacted by the pandemic, and as such, expected a change or disruption to the care they were used to receiving prior to March 2020.

I'm absolutely fine with how the whole health care system worked. You know, she was very supportive and, everything was fine for me. I was totally pleased with the quality of care that I received. [P006]

Participants observed and appreciated extra measures taken by the primary care office to increase the safety of their staff and patients with in-person visits. Several measures were discussed, such as decreased volume of people in the waiting room, decreased time in the waiting room ("more of an in and out"), masks requirements, sanitizer availability, and distancing measures. These measures helped instill a sense of safety for patients, particularly those with vulnerable health status.

There were patients who felt the pandemic impacted their ability to have their health concerns addressed appropriately. Some of the participants described their primary care physician as flustered, busier than ever, overworked, and impatient.

I went for a physical she was so flustered that I couldn't even get all my concerns in there because she was so rushed. She was looking after another doctor's patients and I feel for her. But you know I was really frustrated that some of my concerns didn't even get addressed because she was so flustered that day. [P008]

Participants who attended in-person care from their physicians in their medical home described the multiple layers of pandemic mitigation efforts, such as waiting in the car or mall hallway for their appointment as impersonal and contributed to a sense of fear and doom during the pandemic. One participant stated that she felt it was challenging to follow the primary care office pandemic mitigation strategies because of on-going health concerns.

They had very strict protocols. The first time I went in, there were no chairs in the office. They wouldn't even allow us in, so I had to stand, her office is in a mall. I had to stand in the mall at the time when I was not breathing well. [P025]

Other negative experiences were a result of reduced office hours, or the inability to schedule appointments within a day or

two of a new or developing health concern.

Well one of the things was the change in hours of the doctors too. They went from working 5 days a week to working 3 days a week, and only at certain times and like I can certainly understand you know that everybody has to give and take but it's really hard trying to book an appointment when I'm trying to be a conscientious employee for the school and book it during you know my working hours so I'm not taking time away from when I'm needed at the school [P012].

While overall patients described having their health needs addressed, there is not doubt that COVID-19 mitigation strategies impacted their experience in accessing care. For some patients, this did not detract from them having their health care needs met. For other patients, however, their ability to access primary care for health care needs was a frustrating experience.

Patient experience with virtual primary care during COVID-19

Virtual care as a way of addressing health needs was generally received well by participants. This was particularly the case for respondents who had a long history with their physicians who could rely on previously built rapport and knowledge of their patient's medical history.

I think it was really good actually...Um, but once again you know, because my family doctor was so familiar with my history um, then that's basically all we did when we did have an in person meeting was talk about the issue. You know, sometimes they may need to physically check something but ah, we were able to work around that and to resolve any of the concerns that I had. [P001]

Some individuals stated they began to prefer virtual phone appointments for a variety of reasons, including saving transportation time or not having to wait in the waiting room for appointments. One respondent shared that they began to prefer virtual appointments because they felt more comfortable discussing uncomfortable topics that they were embarrassed to talk about in person.

I think it was ok, and actually in some ways I kind of almost liked the phone appointments more. I had some concerns about something, and it's a little bit embarrassing and it's better to actually just talk to them over the phone rather than talk to them in person. [P018]

There are several themes that are associated with a positive patient experience with virtual care. In general, patients who had better experiences with primary care were under the age of 65+ and tended to have longer history and had built trust with their primary care physician. The existing patient-physician relationship, as well as a familiarity of the patients by the physician office staff,

seems to have provided a stronger foundation that could withstand potential changes and disruptions to patient primary care brought on by the pandemic.

Despite the majority of patients having positive experiences having their health care needs addressed through virtual care, seven patients expressed negative experiences. A couple of respondents felt rushed by their physician through virtual care, and that they had not received the quality of care they expected to receive. For example, one respondent discussed their concerns of being placed on a trial for a low-dose ADHD medication as a result of increased anxiety and felt that they were rushed into it because their physician wasn't spending the time with them during in-person and phone appointments, as they would have normally done.

One of the seven participants who had negative experiences with virtual care pointed to several factors. She spoke on behalf of her father who had a major fall, described how the father was not easily able to manage phone appointments because of his advanced age and challenges with clear and concise phone communication, therefore requiring several adult children to step in and be present during the appointments. This contributed to confusion by the parent/patient and increased stress placed on the children.

It's such a hard one. He had knee replacement surgery; he's 87. So it was just a complication from that. And eventually it got sorted um, with the phone call. You know the doctor finally called and he did sort through it. So if one of us [children of patient] wasn't there I don't think it would have been solved as easily.

A couple of participants described challenges related to phone appointments as it was hard to hear and speak over the phone; they would have preferred video conferencing, which was not offered, but it would have provided an opportunity for clearer communication increasing their comfort and decreasing their anxiety.

I do have one issue with the telephone appointments. I don't have perfect hearing anymore. I rely a lot on lip. Sometimes it was hard to get what I was saying across to him, and same with me. [P005]

In general, for those who had negative experiences with their virtual care, many hoped that primary care would resume the in-person care that was standard prior to the pandemic.

Discussion

This EDQ enquiry revealed that despite COVID-19 impacting primary care services, efforts from primary care physicians working towards meeting the demands placed on the health care system resulted in most participants being able to have their non-COVID-19 health care needs addressed. While some studies have reported on patients disengaging with health services during the

pandemic [16,17], our exploratory study suggests otherwise. Most patients in our study tried, and were able, to get health concerns addressed. Only a few patients experienced difficulties in accessing care to have their issues addressed. Pandemic adaptations seemed to impact the capacity in providing timely care, mostly due to reduced access because of staff shortages, restrictions on in-person visits, and the longer time needed for appointments in consideration of infection control processes, corresponding to findings from other studies [2,7].

Overall, our study found that patients mainly had positive experiences related to virtual health care. Evidence from multiple studies shows that patients consistently report better experience with VC, mostly due to decreased travel time and less time away from other daily responsibilities such as work and school [18-21]. Even among more senior patients, as long as there is a solid and empathic patient-physician relationship [22], VC is a feasible and acceptable alternative in accessing care. This finding is supported in our study, which found that a good relationship between primary care provider and patient was a key factor in having a positive experience with virtual care.

However, Murphy et al. described the use of telephone consultations as being more time consuming, due to the need for more careful questioning of patient symptoms given the inability to assess face-to-face [7]. This finding aligns with some of the negative participant experiences, specifically for individuals who were not interested in telephone appointments, affecting the level and quality of communication over the phone. Concerns were discussed regarding level of hearing, language and quality of telephone connection and background noise. A few respondents would have preferred video conferencing so that they may be able to read lips and other non-verbal cues. These concerns mirror existing research that highlights the concerns and inequitable access that some older patients may experience as it relates to comfort and ease with technology and/or language [23-25]. Triaging according to need, and age, would be helpful to ensure patients are appropriately matched with the kind of care they need, whether it is in person or virtual.

Several important findings from this study can inform the on-going development of high quality patient care in primary care settings, both during pandemics and beyond. The growth of virtual care is an expanding field and should be centering the patient and physician experience. While there are some key findings in this study that could inform this growth, there are a few limitations to be considered. First, the selection of participants for this study emphasized the ability to speak proficiently with the English language in order to be interviewed by the English-speaking interviewer. This resulted in no representation of individuals who are English-language learners or may not have a level of speaking English that would have supported an interview. This is an important limitation

because it does not identify the particular experiences, satisfaction and concerns of these patients, and in particular since the experience of virtual care is associated to the level of verbal communication between patient and physician. This corresponds to another study our team conducted with a newcomer population where this limitation on identifying experiences and concerns due to level of verbal communication was also noted [24].

Second, this study included a fairly wide age range of older adults (55+). Those patients between the ages of 55 and 60 may feel more comfortable with aspects of VC, as opposed to more senior adults. More population-based research examining patient experiences with VC is necessary to further expand upon the findings from this exploratory study.

Third, the interviews for this study were completed mostly by video conferencing, with a few over the telephone. While this potentially skewed towards an over-representation of individuals who would normally be comfortable with telephone or virtual communications, this study was conducted during a time in the pandemic where many individuals were still fearful of in-person contact. Future research including a wider range of participants where technology may not be accessible would be valuable to understand their primary care experiences during the pandemic now that many public health measures are no longer in place and individuals are more likely to be immunized.

Finally, this study did not ask about income level/financial status. Lower income can be related to less access to internet, and as a result, less comfort with the technology needed at times to engage in virtual care. Future studies examining the experiences of older adult experiences should collect this type of demographic information.

Conclusion

The COVID-19 pandemic continues to impact the provision of primary care services. This qualitative study provides a rich understanding of the nuances and complexities of the patient experience of virtual primary care during the pandemic. Overall, participants felt COVID-19 had minimal impact in their ability to have their health issues were addressed, and the option of virtual care seemed to be a positive experience for most. This study provides valuable insight into a range of issues questioned in previous studies from earlier stages in the pandemic including the risk of disengagement from health services and older adult's experiences with virtual care [1,5,26]. In cases where patients had difficulty getting the care they needed, the pandemic adaptations used by primary care practitioners may be playing a role.

Data Sharing: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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