

**Research Article**

Copyright © All rights are reserved by Dominique Malacarne Pape MD

The Doctor Will “See” You Now: Qualitative Analysis of Patient Perception of Telehealth In FPMRS

Miriam C Toaff^{1,2} MD, Dominique Malacarne Pape^{2,3*} MD, Amythis Soltani² MD, Katherine French¹ BA, Haddijatou Jallow¹ BS, Ojiugo Onwumere¹ BA, Rida S Khan¹ BS, Eesha S Khan¹ BS and Cara L Grimes^{2,3} MD MAS

¹New York Medical College, Valhalla, New York, USA

²Department of Obstetrics and Gynecology, Westchester Medical Center, USA

³Department of Obstetrics and Gynecology and Urology, New York Medical College, USA,

***Corresponding author:** Dominique Malacarne Pape MD, New York Medical College, Valhalla, New York, USA and Department of Obstetrics and Gynecology, Westchester Medical Center, Valhalla, New York, USA.

Received Date: March 11, 2024

Published Date: April 26, 2023

Abstract

Introduction and Hypothesis: Use of telemedicine has increased since the COVID-19 pandemic. Urogynecology patients represent a unique and complex population. It is important to understand how they perceive telemedicine. We aim to understand patient-perceived barriers to telemedicine and examine why some did not convert to telemedicine during office closures during the recent pandemic.

Methods: This was a mixed methods study using a questionnaire and one-on-one semi-structured interviews of patients from a urogynecology practice who were scheduled for telemedicine appointments. Interviews were recorded, a codebook was created, and themes were determined using qualitative exploration methodology.

Results: 3 themes were identified: (1) Although participants seemed amenable to telemedicine, there was reservation about using telemedicine for urogynecologic complaints. Participants seemed to specifically equate physical examination and diagnostic testing with an optimal evaluation of their urogynecologic condition; (2) The majority of participants felt comfortable using technology. Although some participants voiced reservations about this technological advancement, most seemed amenable to the use of telemedicine in the future; and (3) There was a willingness to forgo certain comforts of in-person visits, in order to preserve safety. However, the overarching perception was that telemedicine could lend itself to being more impersonal.

Conclusions: While there are challenges to incorporating telemedicine into urogynecology practice, participants felt that telemedicine were practical and helpful. However, concern was expressed for losing the benefit of human touch and testing. Further patient education and development of systems to streamline telemedicine practices will help those who remain hesitant.

Keywords: COVID-19; FPMRS; Qualitative; Telemedicine; Urogynecology

Abbreviations: COVID-19: Coronavirus disease-19; FPMRS: Female pelvic medicine and reconstructive surgery; HIPAA: Health Insurance Portability and Accountability Act

Introduction

In the aftermath of the COVID-19 pandemic, healthcare practitioners are continuously faced with how to move forward in providing safe and effective healthcare. The fear and anxiety surrounding the pandemic did not alter the impact that many

urogynecological issues have on women's quality of life, as many patients sought out care through this challenging time [1]. In efforts to maintain social distancing, providers rapidly adopted and expanded telemedicine modalities to provide care to their patients during the pandemic. Specifically, synchronous modalities, allowing real-time patient-provider interactions, became a new standard of care for many non-emergent issues [2]. Discussion regarding expansion of technological services in healthcare is even more pertinent, as a recent bipartisan bill passed in the House, Advancing Telehealth Beyond COVID-19 Act of 2022. Amongst other allowances, this bill allows beneficiaries to continue to receive telehealth services at any site, regardless of type or location through December 31, 2024 [3].

A growing body of literature supporting telemedicine in the subspecialty of Female Pelvic Medicine and Reconstructive Surgery (FPMRS) has emerged as a result. Societies including the American Urogynecologic Society (AUGS), the International Urogynecological Association (IUGA), and the Society of Gynecologic Surgeons (SGS) have put forth literature supporting and guiding physicians on best practices for telemedicine in FPMRS [4]. It has been elucidated in many studies that FPMRS patients are comfortable using telemedicine services and that consistent, safe, and equitable care may be provided in many ways [4-6]. Additionally, there is data that FPMRS patients already utilize various mobile technologies and many are willing to use them for FPMRS specific care [7]. Recent studies support safe treatment of many urogynecologic conditions through telemedicine including acute cystitis, uncomplicated post-operative care and pessary follow up [5,6,8]. In a previous study conducted at our institution, we found that conversion to telehealth during the office shut-down due to the COVID-19 pandemic in our single provider urogynecology practice was 17.8%. We sought to understand why this conversion rate was so low by qualitatively studying patient perceptions of telemedicine for their urogynecology conditions [9].

There is a paucity of data regarding patient-perceived barriers to telemedicine in urogynecology patients, specifically. However, there is a growing body of evidence in support of telemedicine in other patient populations, namely in primary care experiences and those with conditions such as Type 2 Diabetes [10] and when patients were seeking abortion care services [11]. Many patients report overall positive experiences, and felt they appreciated the discrete atmosphere, although still conferred that in-person visits were important for more serious clinical issues [10,11]. In regards to technological aspects of the modality, many felt comfortable with the technological aspects of telemedicine visits, although some reported technical challenges [12]. In one large retrospective, multi-specialty study of outpatient visits in an academic medical center, researchers found that video visits were associated with overall greater satisfaction than in-person visits during the COVID-19 pandemic. Younger age, new patient visits, and female gender were associated with lower satisfaction [13].

Urogynecology patients are a unique and complex population, and it can be said that on average they may be older and may have less access to some of the technological aspects of telemedicine.

There is a void in the data looking at this population specifically and identified patient-tailored needs in this cohort have not to date been visible. A recent survey examining urogynecology patients' experience with telemedicine found that most participants reported higher quality visits than expected and were satisfied with decreased travel times and the ability to spend more time directly interacting with their physician. The majority of patients were amenable to continuing telemedicine care after the pandemic across various age groups [14]. In another study of urogynecology patients, tele visits for urinary complaints, which often do not need an urgent in-person exam, were associated with greater satisfaction than visits for pelvic complaints [8]. The purpose of this study was to delve deeper into our patient's perception of telemedicine and identify patient perceived barriers to this method of healthcare for the urogynecology population.

Materials and Methods

This was an IRB approved (IRB #14267) mixed methods study using a questionnaire and qualitative evaluation of one-on-one semi-structured interviews with participants from a single provider urogynecology practice who were scheduled for appointments from March 17th, 2020 through June 9th, 2020. This period was during the height of the COVID-19 pandemic and the office was closed to abide by social distancing guidelines. Our practice began offering tele visits to patients during this time and office staff were instructed to call patients via telephone to offer this service. From the 276 patients who were scheduled for in-person visits during this time period, we identified 44 patients who opted for a telehealth visit in place of their scheduled in-person visit. 203 patients did not elect to proceed with a telemedicine visit, and instead, chose to postpone their visit. These 203 patients were eligible for participation in our study.

Eligible patients were contacted via telephone by members of the research team and asked to participate in the study. For non-English speaking patients, HIPAA compliant interpretation services were used (Strata Language Services). If they agreed to participate, a verbal consent was reviewed. An initial questionnaire was conducted to determine the participants age, race/ethnicity, primary preferred language and insurance type. In addition, questions regarding access to technology and the patient's awareness of tele visits were asked, as outlined in Table 1 below. Following this questionnaire, the semi-structured interview was performed. Members of the team that performed the interviews were trained on qualitative interview techniques by the study's principal investigator. An interview guide was utilized when speaking with participants and included open-ended questions. The interview guide is available in a supplemental appendix A. The questions covered topics such as comfort with technology, concerns regarding privacy and confidentiality, participant's positive as well as negative perceptions of telemedicine, and their thoughts about utilizing telemedicine in the future. The de-identified interviews were audio-recorded using recorders and transcribed by individual team members, which were audited and verified by a separate team member for accuracy.

Table 1: Questionnaire outcomes.

Questionnaire Outcomes	n (%)
You were scheduled to have a visit with the urogynecologist during the height of the COVID19 pandemic. Were you contacted regarding the status of this appointment?	
Yes	26 (72.2)
No	3 (8.3)
Unsure	7 (19.4)
Were you offered a virtual visit?	
Yes	9 (25.0)
No	16 (44.4)
Unsure	11 (30.6)
Was this in your preferred language?	
Yes	24 (66.7)
No	5 (13.9)
Unsure	7 (19.4)
Was a translator used?	
Yes	1 (2.8)
No	8 (22.2)
Unsure	3 (8.3)
N/A	24 (66.7)
Which of these bests describes what happened with your in-person appointment?	
I forgot about the appointment	2 (5.6)
I was afraid to come to an in-person appointment	4 (11.1)
I was not concerned enough about symptoms to further pursue appointment.	6 (16.7)
Other	24 (66.7)
Did someone explain to you the process of arranging for a virtual visit?	
Yes	7 (19.4)
No	19 (52.8)
Unsure	10 (27.8)
Can you tell me what devices you would have available to complete a virtual visit? (may choose >1)	
Smartphone	35 (97.2)
Cell phone without ability for video or smartphone applications	1 (2.8)
Landline	12 (33.3)
iPad or other tablet	13 (36.1)
Laptop	19 (52.8)
Desktop computer	10 (27.8)

Content analysis was performed. Transcripts underwent line-by-line coding to identify common themes by three independent researchers. A comprehensive codebook was developed through serial discussions and triangulated amongst the research team. The data was analyzed in a 3-phase coding process using grounded theory methods to perform thematic analysis. Inductive codes were then applied to text fragments. Themes were then coded and then organized into categories and subcategories. Dedoose software (Los Angeles, CA) was used to produce descriptive reports for each code and theme [15]. Themes were compared, and any discrepancies were resolved by additional reviewers.

Results and Discussion

Our diverse participants sample comprised 36 female patients with characteristics outlined in Table 2. Of the participants interviewed, the mean age was 55 years, with 11% being greater than 65 years old. This heterogeneous population included White (66.7%), Hispanic (30.6%) and Pacific Islander (2.8%) patients. The most common primary language was English (66.7%). However, a significant portion of the patient population preferred Spanish (27.8%), while one patient preferred Turkish (2.8%) and another Arabic (2.8%). In addition, the most common insurance type was private (61.1%), followed in order by Medicare (16.7%)

(in two cases combined with private insurance), Medicaid (11.1%), and Charity Care (8.3%). In a few cases insurance type was unknown (8.3%). The most common reason for the visit was bladder complaints (53%), followed by prolapse (22%), recurrent urinary tract infections (16%), post-operative complications (3%),

fistula (3%), and other (3%). A large portion of the patients were new patients (50%), with the remainder being follow-up visits (28%), post-operative visits (14%), treatment visits (5%), and pre-operative visits (3%).

Table 2: Patient demographics.

Patient Demographics	n (%)
Age	
35 - 39	1 (2.8)
40 - 44	4 (11.1)
45 - 49	5 (13.9)
50 - 54	6 (16.7)
55 - 59	8 (22.2)
60 - 64	8 (22.2)
65 - 69	0 (0.0)
70 - 74	3 (8.3)
75 - 79	1 (2.8)
Race/Ethnicity	
White	24 (66.7)
Black	0 (0.0)
Hispanic	11 (30.6)
Pacific Islander	1 (2.8)
Primary Language	
English	24 (66.7)
Spanish	10 (27.8)
Turkish	1 (2.8)
Arabic	1 (2.8)
Insurance Type	
Private	22 (61.1)
Medicaid	4 (11.1)
Medicare	6 (16.7)
Charity Care	3 (8.3)
Union	0 (0.0)
Unknown	3 (8.3)

When asked about original contact regarding the option of telehealth, the majority of participants (72.2%) remembered being contacted about the status of their urogynecologist appointment during the height of the COVID-19 pandemic. Some individuals, however (8.3%) did not remember being contacted and an even larger number could not recall if they contacted (19.4%). In addition, some participants (25%) recalled being offered a virtual visit in place of their in-person visit, yet the majority of participants either reported that they were not offered a virtual visit (44.4%) or reported that they were unsure (19.4%). The majority of participants stated that this office communication was conducted in their preferred language (66.7%) and the remaining participants

stated that their preferred language was not used (13.9%) or they could not recall (19.4%). In regard to non-English speaking participants, one participant (2.8%) reported that they were contacted by the office using a translator, while others denied that a translator was used (22.2%) or could not recall if a translator was used (8.3%).

When asked to describe what happened with their in-person appointments, some participants reported that they were not concerned enough about their symptoms to further pursue an appointment (16.7%). Others reported that they were afraid to come to an in-person appointment due to the COVID-19 pandemic

(11.1%). The majority of participants stated other explanations (66.7%), such as not being contacted to reschedule, being unsure of what transpired with their appointment, strongly preferring to see the doctor in-person rather than over a video, being able to eventually complete a virtual visit, or encountering technological issues. In terms of logistics, most patients either stated that no one explained the process of arranging a virtual visit (52.8%) or that they were unsure (27.8%) if someone explained the logistics of the process to them. Fewer than one-quarter of total participants confirmed that they received instructions on how to arrange such a visit (19.4%). We also set out to understand which device types were available to patients to complete a virtual visit. Most of the cohort reported having a smartphone (97.2%), followed in order by laptop (52.8%), iPad or other tablets (36.1%), landline (33.3%), desktop computer (27.8%), and cell phone without the ability for

video or smartphone applications (2.8%).

Codes from the interviews were organized into four categories (Table 3). Codes such as adequacy of assessment, gathering data points perceived synonymous with diagnostic acumen, lack of reassurance, loss of provider-patient connection, the importance of human touch, and intimacy were categorized as "context of specialty". Execution issues, inadequate privacy, logistical barriers, diminished distractions, and interest in advancement were categorized as "connectivity through communication". Ease of use, comfort through simplicity, cost effective, device proficiency, and novelty were categorized as "the convenience of technology". Conditional satisfaction, safety from unwanted exposure, attention to urgent concern, accessibility, and break from the status quo were categorized as "environmental impact".

Table 3: Categories of codes and exemplary quotes.

Category	Codes	Description of category	Exemplar Quotes
Context of specialty	<ul style="list-style-type: none"> ● Adequacy of assessment ● Gathering data points perceived synonymous with diagnostic acumen ● Lack of reassurance ● Loss of provider-patient connection ● Importance of human touch ● Intimacy 	The nature of urogynecology, including the physical exam, testing, and intimate nature of many of the clinical issues influence the patient's desire to engage with telemedicine. Many patients' perceptions of the conventional human touch and face-to-face interactions impact their engagement and may cause skepticism.	<p>"The fact that you're really just having a conversation, no one's touching, feeling looking, measuring. In this particular circumstance, you're looking for how far the uterus has dropped, you're feeling for where the bladder is, but you can't have any of that in a virtual visit.</p> <p>There's no way in a virtual visit that the doctor is going to be like, yup, you're absolutely right, let's schedule you for surgery.</p>
Connectivity through communication	<ul style="list-style-type: none"> ● Execution issues ● Inadequate privacy ● Logistical barriers ● Diminished distractions ● Interest in advancement 	It was apparent that there were dichotomous views on how patients were able to connect with providers through telehealth. One cohort strongly indicated that this was less private and more disconnected modality. Others felt that there was an improved ability for keen focus. However, many who did not feel adept at using technology, were still interested in learning how to utilize technology for telehealth.	<p>"I was not so happy about it. It seemed a little impersonal and also I felt like I was being cheated a little bit."</p> <p>"We're living in very technological times – people should have options, you know, whatever works for them."</p> <p>I feel like it is actually more focused and attentive care via telehealth. There is a lot more eye contact and general attention and less waiting than I have experienced in person appointments where the doctor is sideways to you, inputting a bunch of stuff in the computer while you talk, usually you sit in the room for a while, so I think it's great.</p> <p>Well as long as the parameters are set properly, meaning there is a waiting room, there is a password specific to that one meeting, then I am okay with it.</p>

<p>Convenience of technology</p>	<ul style="list-style-type: none"> ● Ease of use ● Comfort through simplicity ● Cost effective ● Device proficiency ● Novelty 	<p>The ability to connect via telephone or video modalities outside of the traditional office setting was novel for many patients. For some patients, this was convenient, due to not requiring travel or comfort of use with many pre-existing platforms. Others felt that telemedicine was discriminatory towards those individuals who felt less comfortable using technological devices. There was a common theme that patients felt less involved visits were much better suited for telemedicine.</p>	<p>"I'm very comfortable because [of my] high degree of proficiency of using different devices, different platforms. So very high degree of comfort because [of] my everyday use of technology."</p> <p>"It was strange because this is all new, but I was willing to do it."</p> <p>"So, I get that the world is changing and everything is more computerized but you still have a huge population that you can't write off, that this doesn't always work for them. I think you also have to take into consideration the audience you're dealing with."</p> <p>"Now I'm not 20, I'm 56 years old and I'm really not computer savvy on a phone or on a computer. So the reality of me comfortably figuring this out on my own is like Nil."</p> <p>In terms of scheduling, if it's a telemedicine appointment it would be nice if, once you got your scheduled appointment, that all you had to do is click a link and everything connected. Like, you weren't having to download a special software and sign in and get a log in and put all your personal information. Sometimes it's hard, you know. You get bombarded with all these things you have to register for.</p> <p>It will be good to use technology in that way because it's easier sometimes for you to have counseling without leaving your house or having to move from one place to another.</p>
<p>Environmental impact</p>	<ul style="list-style-type: none"> ● Conditional satisfaction ● Safety from unwanted exposure ● Attention to urgent concern ● Accessibility ● Break from status quo 	<p>Participants felt that depending on certain circumstances, televisits were or were not appropriate. For many, they felt that telemedicine could improve access and be utilized for urgent issues.</p>	<p>"I was not raised this way, this was not the way I was raised. For me, it's doctor in the flesh, you know. Even though it's a fabulous, fabulous thing I think for rural health issues and for working with patients that cannot get access. For people who do have access, it's disappointing. It's like no, 'I want to see my doctors, I want to see them in person.'"</p> <p>"No, I would say it was fine because... I was in a situation where I knew I couldn't go to the hospital because of COVID. You know, COVID had just opened up at the time and...I should say COVID had just locked down everything. So, I was fine with the telemed visit."</p> <p>"I will insist going in person unless it's absolutely impossible where I can't get there because we've had like Hurricane Ida or the doc can't get there, I'm not crazy about having interactions when there is a problem with the doctor on these technologies, not because I don't know how to use them, not because I don't like technology, it's because you're talking about short cutting or short changing the diagnostic process. "</p> <p>So, it works for me telehealth, I don't have to rush getting into the car, go through traffic. Sometimes, I can even do it in my lunch time instead of taking half day off or something like that. I can do it in my lunch time and the appointment is quick."</p>

From our analysis, 3 main themes were identified within these categories: (1) Although patients seemed amenable to telemedicine, there was some reservation about the use of this modality for FPMRS-specific complaints. The participants seemed to specifically equate physical examination and diagnostic testing with an optimal evaluation of their urogynecologic condition. (2) The majority of participants felt comfortable using the technology and had minimal concerns regarding the costs of cellular data or

access to internet connectivity. Although some participants voiced reservations about this technological advancement, most seemed amenable to the use of telemedicine in some capacity in the future. (3) There was a willingness to forego certain comforts of in-person visits, in order to preserve safety, especially given simplicity and ease of accessibility. However, the overarching perception was that telemedicine could lend itself to being more impersonal and should be used for more straightforward and follow-up visits (i.e.,

discussion of straightforward test results, and more straightforward diagnoses.)

This study explored patient perceptions of telemedicine during the COVID-19 pandemic and beyond. Our group of FPMRS patients found that telemedicine was feasible, acceptable, and in certain instances preferred. However, some participants prefer this modality when visits are more straightforward, or for follow-up visits. Patients identified convenience, safety and ease of accessibility as domains that are potentially important to consider when assessing the use of telemedicine. Patients did equate human touch and physical examination with a more thorough and comprehensive experience, while telemedicine was seen as more impersonal. Future directions should focus on which FPMRS visit types would lend themselves optimally to telemedicine, as a way to streamline the use of this technology.

A recent systematic review of telehealth on chronic illness demonstrated that follow-up visits, training, consultations, medications, communication, and caregiver support were ideal usages of telehealth services [16]. Similarly, our study showed a theme that patients were interested in future televisit appointments for simple chief complaints that did not require a physical examination, such as follow up visits or refills for medications. It seems that telehealth can play an integral role in settings deemed appropriate by both patients and healthcare providers.

While there are certain challenges to incorporating telemedicine into urogynecology practice, many of our patients felt that tele visits were practical and helpful. This contributes to the growing body of literature that supports the use of telemedicine. However, to ensure the longevity of this important technology, we must continue to address the concerns that patients have regarding telemedicine. Barriers to telemedicine seen in our study, consistent with previously published data, include the limited physical exam and discomfort with technology, should be addressed to make these options feasible for all [17]. The concern for losing the benefit of human touch and testing obviates that the need for in-person visits still remains. Further patient education about proper use of testing to assist with diagnosis, and the development of systems to streamline telemedicine practices will help those who remain hesitant.

Potential limitations of the study were low patient enrollment and matriculation. We had difficulty enrolling patients in the study either due to the patient-perceived time-consuming nature of interviews or trouble connecting with patients via telephone, as some patients did not have active phone numbers listed in their charts. Additionally, our study was performed using virtual means of recruitment to assess the hesitancy of those who did not schedule virtual alternatives to their appointment, creating a bias. However, given the number of patients who were unsure if they were offered these services, this may not be a significant factor. Given our study period was approximately a year following the patient's proposed televisit, participants may not recall factors that contributed to their non-conversion. This may also be a component of recall bias limiting the findings of this study. Finally, we conducted these interviews based in patient experience during the pandemic.

Telemedicine has advanced a lot since then and it is possible that subjects would have different opinions and attitudes. Strengths include one-on-one interviews conducted to delve deeper into patient thoughts and feelings by asking open-ended questions.

Conclusion

In summary, the recent pandemic provided an environment to identify barriers to effective rollout of telehealth communications. This data is important as physicians examine post-pandemic practices and consider the benefits of continuing to offer telemedicine services. We uncovered thematic elements of patient perceived barriers to telemedicine, as well as positive and negative perceived aspects in the urogynecologic patient population. This data adds to the literature, which will help us to better serve FPMRS patients as we continue to utilize telemedicine as an active part of the healthcare platform.

Acknowledgements

None.

Conflict of Interest

Authors declare no conflict of interest.

References

- Carlin GL, Kimberger O, Morgenbesser R, Umek W, Kölbl H, et al. (2021) Female Pelvic Floor Dysfunction Continues to Negatively Impact Quality-of-Life during the COVID-19 Lockdown. *J Clin Med* 10(5): 1075.
- Toaff MC, Grimes CL (2021) Telemedicine in Urogynecology. *Obstet Gynecol Clin North Am* 48(3):487-499.
- Cheney RL (2022) H.R.4040 -Advancing Telehealth Beyond COVID-19 Act of 2021.
- Barrett F, Stewart LE, Brucker BM (2021) Evidence for the appropriate use of telemedicine in female pelvic medicine and reconstructive surgery. *Curr Bladder Dysfunct Rep* 16(4): 97-104.
- Novara G, Checucci E, Crestani A, Abrate A, Esperto F, et al. (2020) Telehealth in Urology: A Systematic Review of the Literature. How Much Can Telemedicine Be Useful During and After the COVID-19 Pandemic? *Eur Urol* 78(6): 786-811.
- Grimes CL, Balk EM, Crisp CC, Antosh DD, Murphy M, et al. (2020) A guide for urogynecologic patient care utilizing telemedicine during the COVID-19 pandemic: review of existing evidence. *Int Urogynecol J* 31(6): 1063-1089.
- Lee DD, Arya LA, Andy UU, Sammel MD, Harvie HS (2019) Willingness of women with pelvic floor disorders to use mobile technology to communicate with their health care providers. *Female Pelvic Med Reconstr Surg* 25(2): 134-138.
- Sansone S, Lu J, Drangsholt S, Asfaw TS, Segal S (2022) No pelvic exam, no problem: patient satisfaction following the integration of comprehensive urogynecology telemedicine. *Int Urogynecol J* 33(9): 2401-2407.
- Toaff MC, Soltani A, Youssef JA, Holness S, Grimes CL (2021) 90 Rate of conversion to telehealth in a urogynecology practice during the COVID-19 pandemic. *Am J Obstet Gynecol* 224(6): S799.
- Lee PA, Greenfield G, Pappas Y (2018) Patients' perception of using telehealth for type 2 diabetes management: a phenomenological study. *BMC Health Serv Res* 18(1): 549.
- Boydell N, Reynolds-Wright JJ, Cameron ST, Harden J (2021) Women's experiences of a telemedicine abortion service (up to 12 weeks) implemented during the coronavirus (COVID-19) pandemic: a qualitative evaluation. *BJOG* 128(11): 1752-1761.

12. Powell RE, Henstenburg JM, Cooper G, Hollander JE, Rising KL (2017) Patient perceptions of telehealth primary care video visits. *Ann Fam Med* 15(3): 225-229.
13. Ramaswamy A, Yu M, Drangsholt S, Ng E, Culligan PJ, et al. (2020) Patient Satisfaction with Telemedicine During the COVID-19 Pandemic: Retrospective Cohort Study. *J Med Internet Res* 22(9): e20786.
14. Kim Y, Ortega MV, Acker R, Valentine KD, Ayati E, et al. (2022) Synchronous Telemedicine Model in Urogynecology: Are Patients Willing to Continue Telemedicine in the Post-COVID-19 Pandemic Era? *Female Pelvic Med Reconstr Surg*.
15. (2021) web application for managing, analyzing, and presenting qualitative and mixed method research data. Dedoose . Los Angeles, CA: Socio Cultural Research Consultants, LLC.
16. Bitar H, Alismail S (2021) The role of eHealth, telehealth, and telemedicine for chronic disease patients during COVID-19 pandemic: A rapid systematic review. *Digit Health* 7: 20552076211009396.
17. Nanda M, Sharma R (2021) A Review of Patient Satisfaction and Experience with Telemedicine: A Virtual Solution During and Beyond COVID-19 Pandemic. *Telemed J E Health* 27(12): 1325-1331.