Telemedicine Including Video-Based Visits in Rheumatology in COVID-19 Pandemic: Not Yet Ideal

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To most people, 2020 will be remembered as the year of coronavirus disease (COVID-19). Individuals with cardiometabolic conditions are at higher risk of COVID-related complications.[1] Immune-mediated diseases may increase the risk of COVID-19–associated morbidity,[2] and patients with immune-mediated and other rheumatic diseases and their providers are concerned.[3] Because COVID-19 is highly contagious, patients with chronic conditions are advised to limit leaving their home, including clinic visits. As a result, in-person clinic visits dropped between 60% and 70% in March and April 2020.[4] Failure to have routine medical care could result in an exacerbation of non–COVID-related chronic conditions. Telemedicine was seen as an alternative to in-person care. Federal, state, and private payers encouraged the use of telemedicine by relaxing existing regulations and increasing reimbursement.[5] Clinics, including rheumatology practices, began to rapidly increase their use of telemedicine.[6]

This rapid but necessary deployment meant that little attention was focused on ensuring that telemedicine was patient-centered. This is of special concern in a rheumatology practice where physical examination including joint examination is a key focus of clinical encounters. The purpose of this study was to capture the perceptions of patients and providers in rheumatology clinics on their experiences with telemedicine during the COVID-19 pandemic.

RESEARCH DESIGN/METHODS

Between June and July 2020, we telephone-interviewed a convenience sample of 12 patients with visits in the last 2 months from 2 rheumatology clinics that had implemented telemedicine protocols during the pandemic. Participants had to speak English and have had a recent telemedicine visit. Providers included 6 rheumatologists, and 6 nursing staff members, who participated in telemedicine visits.

Telephone interviews were conducted by an experienced qualitative researcher (A.G.H.), a health services researcher, who did not know any of the participants personally. J.A.S. coordinated with his lead nurse manager to recruit patient and nurse participants from the clinic. In addition, J.A.S. recruited physician participants. A.G.H. collaborates with J.A.S., a rheumatologist, on projects to improve the quality of care for patients with immune-mediated conditions. Both J.A.S. and A.G.H. were concerned about the impact of the pandemic on care for individuals with immune-mediated conditions. Interviews lasted about 30 minutes for both patients and providers. Interviews were recorded and transcribed.

Participants discussed their experiences with telemedicine, and the receipt of medical care during the past 2 months. Using NVivo (QSR International Pty. Ltd., released March 2020; https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home), researchers (A.G.H., D.H.K., and C.R.) read and coded the transcripts and identified key themes. Themes appeared consistent across patients and providers, and we determined that we would not acquire any new information with additional patient or provider interviews. None of the participants whom we reached by telephone refused to participate. However, we did have 2 patient participants and 1 nurse participant who did not answer the telephone after making an appointment to be interviewed. We were unable to reschedule with those individuals.

Patients received $30 in compensation for participation. The University of Alabama at Birmingham's Institutional Review Board approved the protocol.

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The University of Alabama at Birmingham's Institutional Review Board approved this study, and all investigations were conducted in conformity with ethical principles of research (UAB X120404005).

No individual person's data were presented in any form in this study, and therefore no consent to publish is required.

These data are available from the authors after obtaining permission from the University of Alabama at Birmingham's Institutional Review Board.

J.A.S. has received consultant fees from Crealta/Horizon, Medisys, Fidia, UBM LLC, Trio Health, Medscape, WebMD, Clinical Care options, Clearview Healthcare Partners, Putnam Associates, Focus Forward, Navigant Consulting, Spherix, Practice Point Communications, the National Institutes of Health, and the American College of Rheumatology. J.A.S. owns stock options in Vaxart pharmaceuticals. J.A.S. previously owned stock options in Amarin, Viking and Moderna Pharmaceuticals, and Charlotte's Web Holdings, Inc. J.A.S. is on the speakers' bureau of Simply Speaking. J.A.S. is a member of the executive of Outcomes Measures in Rheumatology, an organization that develops outcome measures in rheumatology and receives arms-length funding from 12 companies. J.A.S. serves on the FDA Arthritis Advisory Committee. J.A.S. is the chair of the Veterans Affairs Rheumatology Field Advisory Committee. J.A.S. is the editor and the director of the University of Alabama at Birmingham Cochrane Musculoskeletal Group Satellite Center on Network Meta-analysis. J.A.S. previously served as a member of the following committees: member, the American College of Rheumatology's (ACR) Annual Meeting Planning Committee and Quality of Care Committees, the Chair of the ACR Meet-the-Professor, Workshop, and Study Group Subcommittee and the cochair of the ACR Criteria and Response Criteria subcommittee. A.G.H., D.H.K., and C.R. declare no conflict of interest.

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RESULTS

Sample Characteristics

The mean age of patient participants was 57 (SD, 16.2) years (range, 23–77 years). One-third were male, and one-third identified as African American. Years of practice among the physicians ranged from 2 to 40 years (mean, 15 [SD, 14.2] years). Three were male, and 3 were female. Nurse participants included a nurse manager, a team lead registered nurse, a licensed nurse, and 3 certified medical assistants; all were female.

Key Themes

Patients identified being around other people as the biggest challenge related to the COVID-19. One patient stated, "I would say going out in public. I think that's the biggest challenge because you are around strangers. So, you do not know who's been diagnosed with what." Patients also identified practicing good health behaviors, such as wearing a mask and frequently washing their hands, as major challenges. For instance, one patient expressed, "I think the main thing is trying to keep your hands clean and keep your mouth covered."

Majority of the patients viewed telemedicine visits positively. Many patients expressed fear about infection and appreciated not having to go to the clinic. For example, one patient noted, "I liked not having to park, walk through hallways, sitting, waiting, and having to interact with others. I am afraid of COVID." Patients also found telemedicine to be a sufficient option for those not experiencing critical issues. One patient expressed, "I think telehealth, if you are not having any major problems, it's sufficient right now until we get what's going on with COVID-19." One patient did express displeasure for telehealth saying, "I dislike it because I would like my doctor to examine me."

Most patients reported no technological problems with using the telemedicine platforms. Even older patients found downloading and installing the telehealth platform to be a simple process. On the day of the appointment, providers would text patients, and patients would simply click on the embedded link to be connected. One patient who lived in a rural area reported difficulty in connecting due to limited Wi-Fi service in her area.

Patients reported no concerns with communicating with their provider using telehealth. In fact, one individual who had a telephone consult felt that visit was less rushed compared with his in-person visits. Most patients liked the convenience of telehealth visits and mentioned that they could continue to use telehealth indefinitely, although they would prefer having an in-person visit at least once a year.

Providers

Many of the physicians noted several problems that should be addressed to ensure telemedicine visits are patient-centered and effective. Two most common problems were as follows: problems with technology and inability to conduct physical examination. Physicians noted that some patients had problems with using technology, including difficulty downloading and launching the software, or being able to adequately hear the conversation. Furthermore, physicians voiced their concerns about not being able to conduct physical examinations, an essential aspect of providing care to patients with rheumatic diseases. However, physicians also noted that they appreciated being able to view a patient's home environment. Telemedicine visits were found to be effective for patients who had an immediate acute need. Telemedicine visits were less effective for new patients, where patient-provider encounters are longer and require the elicitation of patient narratives about the course of their disease.

Nursing staff discussed concerns with logistical issues including identifying problems before the visit or being able to confer with a physician privately about a patient's condition. In some instances, the physician would conclude the video chat before a nurse could follow-up with next steps including patient education or helping a patient obtain laboratory tests.

Both the providers and patients said that telemedicine is ideal for follow-up visits to discuss nonsevere symptoms or results of laboratory tests. However, they are not suitable for comprehensive visits aimed at identifying new rheumatic or immune disease diagnoses or developing appropriate treatment plans.

CONCLUSIONS

The rapid shift to telemedicine was necessitated by COVID-19 concerns. Although such visits were found to be generally favorable among patients, providers had a number of concerns. Decreases in rates of COVID-19 infection may signal a return to in-person visits. However, there is an expectation that visits will continue to occur virtually. Attention, especially to logistical issues, will improve the telemedicine experience for providers and their patients.

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