

gene picture of OA prevalence over time, including for OA at other joints, should be robust.

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1. Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Institute for Health Metrics and Evaluation. URL: <http://ghdx.healthdata.org/gbd-results-tool>.
2. Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Data Input Sources Tool. Institute for Health Metrics and Evaluation. URL: <http://ghdx.healthdata.org/gbd-2019/data-input-sources>.

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Report of the American College of Rheumatology Fellows-in-Training Subcommittee: experiences of rheumatology fellows early in the COVID-19 pandemic

To the Editor:

With the rapid spread of COVID-19, rheumatology trainees have faced challenges and uncertainties. Many fellowship programs were forced to rapidly implement innovative methods to educate trainees on COVID-19 while also attempting to safely maintain high-quality patient care during the pandemic (1). How COVID-19 and these changes impacted trainees' well-being and education remain unclear.

To understand how fellowship programs were addressing the training of adult and pediatric rheumatology fellows during the early period of the COVID-19 pandemic, the American College of Rheumatology (ACR) Fellows-in-Training (FIT) Subcommittee members created an anonymous electronic survey. The survey was distributed to adult and pediatric rheumatology fellows via email on June 2, 2020 and closed on June 8, 2020. The rapid distribution and closing of the survey resulted in a snapshot of

how COVID-19 initially impacted fellowship education, as well as topics of discussion for fellow townhalls and ACR sessions. The survey questions assessed how the pandemic affected 3 key areas: learning, patient care, and trainee resiliency. All questions were asked in multiple-choice format, allowing respondents to select all the answer options that apply except for the questions on coping mechanisms and topics for town hall discussion, which were open-ended questions. Return of the survey indicated participant consent.

Of 722 surveys distributed, 132 US rheumatology fellows (18.2%) completed the survey (45% in year 1, 43.6% in year 2, and 9.4% in year 3 of fellowship training). Table 1 shows areas of concern related to the early impact of COVID-19 as reported by rheumatology fellows, with the most common being education, physical health and safety as a clinician, and rheumatology job market. For education, 51.2% of respondents reported that the

Table 1. Areas of concern, effect on fellow education, and format of fellow clinics during the early COVID-19 pandemic period as reported by survey respondents*

	Selected response, % of respondents (n = 132)
Areas of concern	
Education	72.6
Physical health and safety as a clinician	71.8
Impact on the rheumatology job market	69.2
Potential changes to how rheumatologists will practice medicine in the future (telemedicine)	64.1
Emotional health	50.4
Ability to complete research project(s)	48.7
Potential changes to fellowship next year	43.5
Financial stress	22.2
Lack of childcare	18.8
Ethical dilemmas	18.8
Effect on fellow education	
Receiving clinical experience and education entirely through virtual platforms	51.2
Previously used virtual platforms, but resumed in-person training	35.9
No interruption on fellowship responsibilities	13.6
Rheumatology training on hold and currently providing care for patients with COVID-19	4.2
Format of fellow clinics	
Mix of both in-person and virtual	53.8
Completely virtual	37.6
Completely in-person	8.6

* Respondents were adult and pediatric rheumatology fellows who participated in a survey developed by the American College of Rheumatology Fellows-in-Training Subcommittee, which was opened on June 2, 2020 and closed on June 8, 2020.

in-person didactics became completely virtual, and 91.4% of respondents reported that their clinics were changed to telemedicine or a hybrid of telemedicine and in-person.

The most commonly reported coping mechanisms among respondents were exercise, family and colleague support, and reading. For virtual town hall topics, respondents most commonly suggested discussions on how the pandemic is affecting the rheumatology job market with specific concerns on hiring freezes, virtual job interviews, and salary negotiation. The next most requested topic was optimization of telemedicine appointments (i.e., conducting virtual physical examinations, ensuring thorough evaluation, and enhancing the telehealth visit experience for both patients and physicians).

To our knowledge, this is one of the first national reports focusing on experiences of rheumatology fellows early during the COVID-19 pandemic. The survey showed that training of the majority of fellows was interrupted by the pandemic and that main concerns of rheumatology fellows-in-training centered on education and physical health. These results have the potential to meaningfully impact the fellowship training environments by addressing these FIT-specific needs and concerns.

Our survey has several limitations. First, because the response rate was 18.2% and only US fellowship programs were included, findings may not reflect the experience of trainees at large. Next, our results captured the experiences of fellows-in-training during the early stages of the pandemic with a potential response bias. Thus, the survey may not fully reflect the current experiences of all trainees.

Based on the survey results of the early impact of COVID-19, future fellowship programs should maximize their resources to address the education and physical safety concerns of fellows-

in-training. As there was a mixed impact of COVID-19 on fellow education and clinical responsibilities, program leadership can use the fellow concerns to guide and individualize rheumatology didactics and clinics to maximize learning opportunities for fellows. With the uncertainty of respondents on rheumatology practice and hiring of rheumatologists, programs and conferences should have sessions that specifically address best telemedicine practices and job searching during a pandemic. Follow-up studies are crucial to better understand the evolving needs of the rheumatology fellows during these unprecedented times.

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1. Lockwood MM, Wallwork RS, Lima K, Dua AB, Seo P, Bolster MB. Telemedicine in adult rheumatology: in practice and in training. *Arthritis Care Res (Hoboken)* 2021. doi: <https://doi.org/10.1002/acr.24569>. E-pub ahead of print.