

Response to Letter to The Editor

The Future of Axial Spondyloarthritis Rehabilitation: Lessons Learned From COVID-19

Rosemarie Barnett, Raj Sengupta

Affiliations and degrees:

Rosemarie Barnett, BSc, Royal National Hospital for Rheumatic Diseases, Royal United Hospitals NHS Foundation Trust, Bath, UK. Department for Health, University of Bath, Bath, UK. <https://orcid.org/0000-0002-2215-4970>

Raj Sengupta, MBBS FRCP PGCME, Royal National Hospital for Rheumatic Diseases, Royal United Hospitals NHS Foundation Trust, Bath, UK. Department of Pharmacy & Pharmacology, University of Bath, Bath, UK. <https://orcid.org/0000-0002-9720-0396>

Corresponding author: Rosemarie Barnett, Royal National Hospital for Rheumatic Diseases, Royal United Hospitals NHS Foundation Trust, Bath, BA1, UK. Email: rlb60@bath.ac.uk. Telephone: 01225 428331.

Funding statement: No funding support was received for the present manuscript.

Author contribution: Rosemarie Barnett: 1a,b,c, 2, 3; Raj Sengupta: 1b, 2, 3.

Dear Editor,

We thank Gonçalves and colleagues for sharing their response to our recently published article: "The Future of Axial Spondyloarthritis Rehabilitation: Lessons Learned From COVID-19". We read with great interest their perspective from Portugal as they recover from the pandemic, and have established a protocol for referring people living with axial

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the [Version of Record](#). Please cite this article as doi: [10.1002/acr.25010](https://doi.org/10.1002/acr.25010)

spondyloarthritis (axSpA) and moderate to severe functional limitation, to an in-person supervised patient-tailored multimodal rehabilitation program. As the authors indicate, such interdisciplinary programs are critical for optimizing the support and rehabilitation care of axSpA patients. Perhaps even more pertinent now, in the aftermath of the pandemic, whereby many patients with inflammatory arthritis may be struggling to control their symptoms (1-4). Evidence supporting the use of supervised physiotherapy in axSpA is well-established (5). We are therefore delighted to learn of the newly introduced patient-tailored rehabilitation program at Vila Nova de Gaia/Espinho Hospital Center.

To clarify, we envisage digital health interventions as a potentially useful adjunct to in-person patient care; to enable flexibility of care, and to provide continued self-management support to patients all year round, beyond infrequent clinic appointments or in-person rehabilitation programs (6). Indeed, by the route of standard care, many patients living with axSpA in the UK will see their rheumatologist or specialist physiotherapist once a year, or less – leaving them with 8,758 hours in a year where they must manage their condition somewhat independently (7, 8). Furthermore, specialised group-based, in-person multidisciplinary interventions for supporting self-management and rehabilitation are inevitably often resource intensive, or only delivered in specialist, tertiary settings, with long waitlists. Other barriers to attendance include issues relating to travel, and the time required off work – particularly pertinent for axSpA where age of onset is predominantly in the 20s or 30s, a critical time for establishing careers and relationships (5, 9). Post-pandemic workload pressures have furthermore resulted in services struggling to deliver specialist support to patients, particularly regarding education and non-pharmacological treatment, making good long-term self-management more difficult for patients (1). The May 2022 All-Party Parliamentary Group meeting for axSpA highlighted insufficient capacity across the

physiotherapy workforce to deliver the level of care recommended by the National Institute for Health and Care Excellence in the UK; 50% of hospital departments without physiotherapists embedded in their multi-disciplinary rheumatology team (10). A recent UK survey by the National Axial Spondyloarthritis Society (NASS) demonstrated demand from both patients and healthcare professionals for virtual self-management programs for axSpA (11). There is therefore an unmet need for novel, scalable interventions that can better support patients in their self-management/rehabilitation and reduce pressure on healthcare services.

Nevertheless, we absolutely concur with the authors that the digital infrastructure of many countries' national health services, including the UK, is not yet sufficiently optimized to plan and successfully deliver a fully blended in-person/digital service. We highlight in our article that the optimization of digital infrastructure, staff skills, and digital education will be critical (5). As will close collaboration between patients, healthcare professionals, and researchers. Although our article describes the success of a single-centre virtual rehabilitation program during the pandemic (and the remarkable flexibility and agility of our colleagues to launch such a program, during a remarkably challenging time), we also emphasise the need for robust evidence to ensure the acceptability, accessibility, and efficacy of digital rehabilitation interventions, before widespread implementation. With further research and optimisation of both in-person and digital service provision/rehabilitation, we may collectively iterate towards a future of ultimately improved, more flexible, more resilient care for people living with conditions such as axSpA.

References

1. National Institute for Health and Care Excellence. NICE Impact Arthritis Report. <https://www.nice.org.uk/about/what-we-do/into-practice/measuring-the-use-of-nice-guidance/impact-of-our-guidance/nice-impact-arthritis>. [Last accessed 18th May 2022]. 2022.
2. Garrido-Cumbrera M, Marzo-Ortega H, Christen L, Plazuelo-Ramos P, Webb D, Jacklin C, et al. Assessment of impact of the COVID-19 pandemic from the perspective of patients with rheumatic and musculoskeletal diseases in Europe: results from the REUMAVID study (phase 1). *RMD Open*. 2021;7(1).
3. Benavent D, Garrido-Cumbrera M, Plasencia-Rodríguez C, Marzo-Ortega H, Christen L, Correa-Fernández J, et al. Poor health and functioning in patients with axial spondyloarthritis during the COVID-19 pandemic and lockdown: REUMAVID study (phase 1). *Ther Adv Musculoskelet Dis*. 2022;14:1759720x2111066685.
4. Smith TO, Belderson P, Dainty JR, Birt L, Durrant K, Chipping JR, et al. Impact of COVID-19 pandemic social restriction measures on people with rheumatic and musculoskeletal diseases in the UK: a mixed-methods study. *BMJ Open*. 2021;11(6):e048772.
5. Barnett R, Sengupta R. The Future of Axial Spondyloarthritis Rehabilitation: Lessons Learned From COVID-19. *Arthritis Care Res (Hoboken)*. 2022;74(1):44-9.
6. Nikiphorou E, Santos EJF, Marques A, Böhm P, Bijlsma JW, Daien CI, et al. 2021 EULAR recommendations for the implementation of self-management strategies in patients with inflammatory arthritis. *Annals of the Rheumatic Diseases*. 2021;80(10):1278-85.

7. Gregory WJ, Brazendale J, Greenall C, McCall G. P252 Physiotherapy services in axial spondyloarthritis in the North West of England. An ASSIGNw benchmarking survey. *Rheumatology*. 2022;61(Supplement_1):keac133.251.
8. National Axial Spondyloarthritis Society. Developing the NASS Self-Management Program: Improving health outcomes among axial SpA patients. Last accessed 18th August 2022. <https://nass.co.uk/wp-content/uploads/2022/03/See-the-Impact-NASS-Self-Management-Pilot-Report.pdf>. 2022.
9. Barnett R, Ingram T, Sengupta R. Axial spondyloarthritis 10 years on: still looking for the lost tribe. *Rheumatology*. 2020;59(Supplement_4):iv25-iv37.
10. National Axial Spondyloarthritis Society. Eighth Group Meeting: Rheumatology Physiotherapy, All-Party Parliamentary Group on Axial Spondyloarthritis Minutes, May 2022. Last accessed 18th August 2022. <https://nass.co.uk/wp-content/uploads/2022/07/APPG-on-Axial-SpA-Eighth-Meeting-Minutes-03.05.22.pdf>. 2022.
11. Clark ZE, Gregory W, Chan A, Coy A, Cox Z, Dickinson S, et al. P264 Bridging the gap: co-producing a virtual self-management program for individuals living with axial spondyloarthritis. *Rheumatology*. 2022;61(Supplement_1):keac133.263.