Primary care provider training program improves rheumatoid arthritis care in Navajo Nation

8 November 2022

Research presented this week at ACR Convergence 2022, the American College of Rheumatology's annual meeting, described a novel program that offers rheumatoid arthritis (RA) training to primary care providers in the Navajo Nation, the largest American Indian reservation in the United States.

Despite the high prevalence of RA and associated morbidity and mortality in this vulnerable community, the Navajo Nation has a single rheumatologist serving 250,000 tribal members. As a result, most RA care has shifted to primary care providers on the reservation, who do not feel confident prescribing RA medications or managing the disease.

In addition to developing the RA training program, known as the Rheumatology Access Expansion Initiative, researchers wanted to understand how the program affected provider knowledge and self-reported confidence in RA diagnosis and management.

"The United States faces a critical shortage of rheumatology providers, and this deficit is expected to worsen dramatically over the next decade. In addition, racial and ethnic minorities, particularly Black, Latinx, and Indigenous people, often face longer delays in diagnosis and treatment and [have] less access to rheumatology care," explains Jennifer Mandal, MD, an assistant professor at the University of California, San Francisco (UCSF), director of the RAE Initiative and the study's lead author.

Dr. Mandal says for many patients, the physical distance from the nearest rheumatologist is an insurmountable barrier. Meanwhile, many primary care providers have no choice but to attempt to diagnose and treat rheumatologic diseases with little or no specialist guidance.

The 12-week training program was designed by a team of rheumatologists, pharmacists, and Navajo cultural interpreters. It is based on an established educational model, Project ECHO (Extension for Community Healthcare Outcomes), which uses videoconferencing to conduct seminars with community providers. The RA Navajo Nation curriculum included weekly interactive seminars consisting of a didactic followed by case discussion. Participants included 15 physicians plus a nurse practitioner, physician assistant, and community health worker.

The providers completed a pre- and post-training knowledge test covering RA diagnosis and management. They also completed pre- and post-
training surveys about their confidence in three areas: RA diagnosis, treatment with conventional disease-modifying anti-rheumatic drugs (cDMARDs), and treatment with biologics. Participants were also asked to rate the usefulness of each session, using a scale ranging from one (not useful) to five (extremely useful).

Among those who completed the knowledge and confidence surveys, performance on the knowledge test improved 22%. Confidence ratings rose significantly, with the greatest increase in management with biologics. The mean session usefulness rating was 4.52 out of 5 (17 of 18 participants).

"We successfully designed and implemented a 12-week RA training program for Navajo Nation primary care providers. The curriculum, now in its third cohort, has been very well received and has improved the providers' knowledge of evidence-based RA guidelines and their confidence in disease management," Dr. Mandal says.

Future plans include expanding the program to other Native American communities and potentially developing a new course on spondyloarthritis. The researchers also intend to look at patient outcome data, but "given the history of medical exploitation of American Indians, it is important to us to establish a solid track record of trust and reliability in the Navajo community for several years before we ask permission to review patient health records."

For now, Dr. Mandal says, "This model is cost-effective, logistically feasible, even in very rural communities, and easily scalable. We hope our work can serve as a blueprint for other rheumatology providers who may be interested in launching similar remote training programs in other underserved communities across the United States and beyond. By providing high-quality rheumatology training and mentoring to front-line primary care providers in vulnerable communities, this program could have a positive impact on many thousands of patients suffering from rheumatic diseases."

More information: [Conference abstract](#)