

# Use of musculoskeletal ultrasound in rheumatoid arthritis in Turkey among rheumatologists: A national targeted ultrasound initiative survey

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To the Editor,

In the last several years, the target of treatment in rheumatoid arthritis has been to obtain a state of remission (1). Composite indices are recommended to be used to define remission. However, the subjectivity of composite indices complicates the reflection of a true remission state.

Musculoskeletal ultrasound (US) imaging is a novel method that is used to increase the accuracy of the physical examination (2, 3). An increasing number of rheumatologists all around the world have started using US, especially to detect early inflammation, as well as to truly identify the disease activity, guide injections, and monitor therapies. In addition to all of the advantages, US is also cost-effective, non-invasive, and tolerated better than magnetic resonance imaging (4, 5). Because of these advantages, US was also introduced in the rheumatology community in Turkey in 2006. Since then, there have been various international and national courses to train both consultants and fellows in Turkey. The aim of these courses was to train and encourage more rheumatologists to use US imaging in daily practice. In 2013, the Turkish Rheumatology Society also started being represented in an international organization, named the "Targeted Ultrasound Initiative- TUI," the ultimate target of which is to increase the use of US in the field of rheumatology and improve patient care ([www.targetedultrasound.net](http://www.targetedultrasound.net)). As a part of this group, a survey was conducted among rheumatologists in Turkey in order to identify what percent of rheumatologists are doing US, the reasons for doing so, and the limitations if they are not able to perform it.

For that purpose, all rheumatology centers were contacted by personal interviews, including consultants and fellows in rheumatology. A survey was proposed, including questions designed to assess if they have a US machine, if they are doing US, the indications, their training level and how they were trained, whether they feel confident or not, and the barriers for not doing US in daily practice.

Among 180 rheumatologists, 108 (60%, 80 consultants, 28 fellows) participated in the survey. Fifty-six percent of the participants stated that they use US in their daily practice. When divided according to academic degree, the rate of US use was 49% among consultants and 79% among fellows.

Then, participants were asked how many more US assessments they would like to do in RA patients in 1 week if their difficulties and limitations were overcome to understand how much more they feel the need to do so; 38% declared none, whereas 48% stated 1%-10% more RA patients, and 14% said more than >20% RA patients should have a US assessment.

Twenty-four percent of the participants did not have any training in US, and the other 22% stated that they do not feel confident despite the courses they have attended. For their training sources, 47% of the participants had their training in courses, 15% had their training on site, and 14% had their training both on site and in courses. These data show that among Turkish rheumatologists, 46% of rheumatologists are still in need of further training in US.

The results of this survey have shown that although more than half of rheumatologists have been trained in US, there is still a significant number of rheumatologists who do not perform it in daily practice.



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Several reasons were declared by the participants for not performing US examination in RA. The number one reason was lack of time. With the increasing number of patients and governments' new regulations on hospitals, the time spent on a patient has decreased, and this has influenced the decision of rheumatologists to perform US. Another reason was not having a US machine or not having enough US machines in a division with more than one rheumatologist. The need for more training was another reason declared by the rheumatologists.

This survey has shaped up the approach of the TUI-Turkey and Turkish US study group. The needs of rheumatologists were identified. More training at different levels was organized, as were EULAR-certified US courses. Research protocols have been conducted to find out which joints should be scanned by US in RA, with the ultimate target of providing recommendations to rheumatologists.

In conclusion, the current survey shows that with more training courses and guidance, we

believe the more rheumatologists, especially fellows, would be keen on performing US.

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