Reducing health inequalities

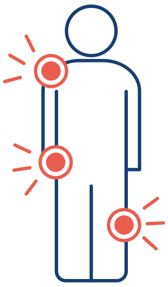
Rheumatic and Musculoskeletal Diseases

The vision of the **National Institute for Health and Care Research (NIHR) Manchester Biomedical Research Centre (BRC)** is to drive personalised health and care for all. We translate our scientific discoveries into new tests, treatments, devices and preventative measures to improve people's lives and reduce health inequalities through translational and cutting-edge research.

This case study showcases how our **Rheumatic and Musculoskeletal Diseases (RMD) Theme** is working to reduce health inequalities.

How is the Rheumatic and Musculoskeletal Diseases Theme working to reduce health inequalities?

Rheumatic musculoskeletal diseases include conditions such as **rheumatoid arthritis** and **psoriatic arthritis,** which together affect over half a million adults in the UK. Biologic therapies have been developed to treat these types of inflammatory arthritis, and work by blocking the molecules and cells that drive inflammation.



Through our research, we have been collecting information on people starting these biologic treatments to understand how well they work and whether it is possible to better target **the right treatments to the right patients**, to provide better personalised treatment and care.

As part of this, we explored whether there were any differences in the way treatments were prescribed according to whether patients lived in more or less deprived areas. We used a measure called the index of multiple deprivation, which uses postcodes to broadly group areas according to the level of deprivation.

We showed that people had equal access to these treatments, regardless of whether they lived in the most deprived areas compared to less deprived areas, for both rheumatoid and psoriatic arthritis. However, for people with rheumatoid arthritis, treatments worked less well in those from the most deprived areas and further research is needed to understand why that might be.

We noticed that, from the data that we had collected, **95%** of the people taking part in the studies were White. We want to explore possible reasons why people from other ethnicities are less likely to take part in our studies and we are exploring **3** possible explanations:

1 People from diverse ethnic groups are less likely to be approached by clinical teams to take part in research studies.

We are now exploring this to understand what factors influence a decision to approach someone to take part in a research study and this work will focus on clinical research delivery teams. If we can understand what choices people make about who to ask to take part in research, we may be able to develop strategies to encourage research teams to offer inclusive research opportunities to people from all backgrounds.

We are now routinely collecting data from people participating in our research studies related to ethnicity so that we can better understand who we are including in studies. In one recently completed study of 50 patients with rheumatoid and psoriatic arthritis, 18% were from a minority ethnic background, which reflects the demographic make-up of England and Wales (Census 2021).

2 Language may be a barrier in understanding how to manage arthritis and its treatment.

To explore this, we have looked at the existing scientific literature around language barriers to identify common themes that affect understanding and management of rheumatoid arthritis. We are talking to patients with rheumatoid arthritis whose main language is Urdu, to understand the challenges they experience. We chose to look at Urdu speakers as a starting point as this is a common language spoken in the Greater Manchester population we serve. We have appointed a PhD student who speaks Urdu and is from the same heritage/background as the patients, to undertake this project. The plan is to produce information about management and treatment of rheumatoid arthritis in a format that works for people whose main language is Urdu, based on the findings of the interviews.

3 People from diverse ethnic backgrounds may not feel confident or listened to in research.

We have established links with a local Indian Senior Citizens Centre and have presented our research to them; this is a first step to establishing links with a variety of groups representing diverse ethnic backgrounds. As a result, last year, one of the people from the Centre agreed to join our research user network, a group of carers of or patients with arthritis, who are involved in developing our research studies. We are planning to run patient involvement discussion sessions on different research projects, at the Centre and we hope this will lead to more members getting involved with our network.