## Editorial

## COVID-19 and ethnicity: challenges in rheumatology

The coronavirus disease 2019 (COVID-19) pandemic has impacted internationally since March 2020 [1]. Data from the Office of National Statistics in the UK and the Centre for Disease Control in the USA suggest people from black, Asian and minority ethnic (BAME) backgrounds have been disproportionately affected by COVID 19 [1]. Reviews have highlighted the huge inequalities that are apparent despite the valiant national and international efforts to fight this global pandemic [2]. The rise of COVID-19 among BAME communities can be due to the increased rates of existing co-morbidities. deprivation and other social and cultural factors [1]. Current ongoing studies indicate the possibility of a genetic link to increase predisposition to COVID 19 among BAME patients [1]. However, mortality rates with COVID-19 in both India and Pakistan remain low at  $\sim$ 3-4% (data sourced 10 May 2020). Vitamin D deficiency and obesity, which are common among BAME patient groups, make this group more susceptible [3]. People living with rheumatological conditions who are on immuno-modulatory or immuno-suppressive medications are also at greater risk of infections [4, 5]. Health Foundation data suggest that key workers in London are more likely to be from a BAME background, thereby resulting in greater exposure [5]. Moreover, insurance charges and lack of universal healthcare provision in USA may be barriers for this group in terms of accessing high-quality healthcare.

Previous research has shown that healthcare provision in chronic diseases in BAME populations is generally inferior to that experienced by the white British population [6] or local population. Delay in help seeking behaviour noted among BAME communities and to adhere to selfmanagement programmes makes this worse [7]. We have previously identified several barriers to treatment access and adherence and their impact on poor medication adherence [8]. Cultural and illness beliefs were noted to play an important role in how these communities approach healthcare [8]. In rheumatology practice, colleagues acting as Ambassadors for Ethnicity Health in Rheumatology have lobbied for national data sets to be collected including infection and death data by age, region, gender, ethnicity, social deprivation and comorbidities. We are aware that local and global registries in rheumatology still lack detail, a control arm and often have a very small number of patients from BAME backgrounds, hence are unable to provide any meaningful outcomes in this context. More granular data needs to be made available within the healthcare context in order to understand these discrepancies [1].

There has been a growing concern about the actual level of shielding and self-isolation amongst BAME communities and how strictly or well these communities may be adhering to the government's guidelines. In the UK, the National Rheumatoid Arthritis Society (NRAS) report that their helpline has been deluged with enquiries from worried and anxious people with RA but very few of these are from BAME communities. Although our group has produced some educational videos to try and explain the current situation to patients, accessing this has been patchy. It does appear that culturally and linguistically appropriate advice has still not reached BAME patients. There are no clear data to demonstrate whether people are following advice or stopping their medications and how they are coping with 'shielding' or feeling supported during this challenging period. In the UK, this anxiety has led the authors to devise a short survey between hospitals serving large numbers of people from BAME communities.

As we progress over the next 12 months with this pandemic there is an essential requirement for additional in-depth understanding from local, national and international data on health-seeking behaviours and the clinical experiences of different ethnic groups during COVID-19. What are the social, cultural and psychological implications of COVID-19 on these communities globally? How are current beliefs and attitudes being accommodated in situations of quarantine, isolation and shielding? Might these views contrast or align across or within different ethnic groups? How does population density and overcrowded housing fit into this equation? Are these groups getting access to the same level of care as other groups? These fundamental questions require serious consideration.

Trials comparing outcomes between groups need to be large with strategies for recruitment and funders need to understand the necessity of inclusiveness when designing such trials [1]. Participation of other stake holders such as general practices, pharmacists, and social care workers in socially deprived areas should be involved in this proposed work. Having a suitable range of culturally, linguistically adapted and validated instruments that assess outcomes is essential in comparing outcomes that go beyond the COVID-19 phase. Although ethnic inequalities in rheumatology outcomes had been identified more than a decade ago [7–10] there has, regrettably, been very little progress. The current crisis is exacerbating this long-standing, unacceptable health inequality in our society.

We believe the lessons learnt during COVID-19 may shine a crucial light on these issues and thus gain the attention required from clinicians, policy makers, national and international societies and patient charities to work harder to reduce the health inequalities. This is the ideal time for us to reflect, share our challenges and experiences and learn from our international counterparts facing similar challenges. This will help us to develop clear evidence-based risk stratification criteria for BAME patients, which can be shared internationally. Research around ethnicity must be prioritized and collaborated on by healthcare providers around the world to tackle the biggest healthcare challenge we have all seen in our lifetimes. While we may be over the peak, there is likely to be a lower level of prevalence of COVID-19 that we will have to live with (until there is a vaccine or definitive treatment). The choices we make now will live with us for a long period of time.

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## References

- 1 Khunti K, Singh AK, Pareek M, Hanif W. Is ethnicity linked to incidence or outcomes of covid-19? BMJ 2020; 369:m1548.
- 2 Pareek M, Bangash MN, Pareek N et al. Ethnicity and covid-19: an urgent public health research priority. Lancet 2020;395:1421–2.
- 3 Watkins J. Preventing a covid-19 pandemic. BMJ 2020; 368:m810.
- 4 Chiappelli F, Khakshooy A, Greenberg G. CoViD-19 immunopathology and immunotherapy. Bioinformation 2020;16:219–22.
- 5 Mehta B, Pedro S, Ozen G et al. Serious infection risk in rheumatoid arthritis compared with non-inflammatory rheumatic and musculoskeletal diseases: a US national cohort study. RMD Open 2019;5:e000935.
- 6 Bhopal R, Sengupta-Wiebe S. Cardiovascular risks and outcomes: ethnic variations in hypertensive patients. Heart 2000;83:495–6.
- 7 Kumar K, Daley E, Khattak F, Buckley CD, Raza K. The influence of ethnicity on the extent of, and reasons underlying, delay in general practitioner consultation in patients with RA. Rheumatology 2010;49:1005–12.
- 8 Kumar K, Raza K, Nightingale P et al. Determinants of adherence to disease modifying anti-rheumatic drugs in White British and South Asian patients with rheumatoid arthritis: a cross sectional study. BMC Musculoskelet Disord 2015;16:396.
- 9 Samanta A, Samanta J, Johnson M, Brooks N. Rheumatoid arthritis in minority ethnic groups: patterns of disease, clinical and sociocultural features among British South Asians. Diver Health Soc Care 2005;2:99–118.
- 10 Kumar K, Raizada SR, Mallen CD, Stack RJ. UK-South Asian patients' experiences of and satisfaction toward receiving information about biologics in rheumatoid arthritis. Patient Prefer Adherence 2018;12: 489–97.

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