

affect maternal and fetal health, yet pregnant people have historically been under-represented in trials due to concerns about fetal risks. This gap results in an absence of evidence-based guidelines tailored to the needs of pregnant patients, especially in China, where autoimmune diseases are on the rise and maternal age trends are advancing.² A search on ClinicalTrials.gov revealed that there were 47 studies over the past decade related to pregnancy and autoimmune diseases, including large cohort studies in Europe and trials for belimumab and levothyroxine in pregnant women with systemic lupus erythematosus. By contrast, China has registered fewer than one-tenth of these studies, with most initiated in the past 5 years, highlighting a substantial research gap in this area.¹

In China, as in many countries, clinical research involving pregnant individuals has been guided by a protectionist ethic. Most previous studies have mainly investigated the relationship between adverse pregnancy outcomes and rheumatic autoimmune diseases in China.³ However, data available on the safety of treatments for pregnant Chinese individuals are scarce. Current and future patients face challenges with the scarcity of information about management of certain conditions in pregnancy. The potential benefits and possibility of fewer harms for future patients should be balanced against present day risks associated with research trials and the lack of understanding about how to mitigate the effects of these conditions. The goal is to ask how much risk is acceptable in a research trial compared with the known risks of undertreating serious conditions. What can justify that additional risk to the patient and fetus? Is that a personal choice? Are there criteria that we could apply that might help us? For example, if the expected outcome of an untreated condition is bad enough, might we allow someone to take a bit more risk for themselves and the fetus?

It is more than just the medical risks of a treatment that the researcher must calculate. Culture also plays a crucial role in shaping an individual's ethical framework, influencing decision making. In Chinese culture, many individuals hold traditional beliefs about health and pregnancy, often prioritising natural remedies and holistic approaches over medical interventions.⁴ This attitude can lead pregnant women to be skeptical of clinical studies, perceiving them as potentially risky or unnecessary. Furthermore, family involvement is essential in decision making; pregnant women often seek input from family members, especially older adults, before making major health decisions. If a pregnant woman's mother or mother-in-law expresses concerns about the safety of a clinical study, she might feel pressured to decline participation, even if she is personally inclined to participate. Therefore, engaging with family members, local communities, health-care providers, and ethicists can facilitate a more culturally sensitive approach to research in China. Prioritising ethical considerations in this context will benefit maternal and fetal health.

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Gout in central Asia: a few things make a big difference

We read with great interest the Article from the GBD 2021 Gout Collaborators reporting the global burden of gout.¹ The estimated growth of 70% in the prevalence gout by 2050 is alarming and a call for action to the global rheumatology community. Having said that, we feel that the study suffers from an arbitrary approach to grouping countries presenting gout statistics.

We find the categorisation of countries in central Asia used by the authors confusing. In the appendix of the Article, central Asia is described by the authors as a region comprising Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Armenia, Azerbaijan, Georgia, and Mongolia. From a geographical and medical point of view, such an approach is against globally accepted definitions of the region. The Medical Subject Headings of the US National Library of Medicine defines central Asia as a geographical area with only the first five former Soviet Union countries.² The same definition is used by the *Encyclopedia Britannica*.³

Based on the information about data sources in the appendix of the Article, gout data were sourced from Georgia only and extrapolated to the whole central Asian region. Georgian and central Asian populations differ substantially in the context of genetics, history, religion, and confounding nutrition habits and related diseases, such as gout. Muslim Turkic nomads are the

indigenous population of central Asia, consuming predominantly meat products. In Georgia, Christian Caucasians historically settled and mainly consumed vegetables and dairy products.

The expected growth in gout prevalence could be due to demographic shifts in the coming decades. However, improved diagnostics and reliable data reporting could also contribute to the expected alarming estimates, particularly in central Asia.

With prioritisation of gout training and provision of diagnostic tools, related statistics might reveal a new epidemic in the region. There has already been a substantial increase in the reported incidence of rheumatoid arthritis in Kazakhstan during the past 10 years due to intensive education initiatives on rheumatoid arthritis diagnosis and an increase in the number of rheumatologists. We recently wrote about the problem of rheumatoid arthritis growth in central Asia.⁴

Currently, only one polarising microscope is in use in Kazakhstan. However, ten new rheumatology centres, each equipped with a polarising microscope, are about to open across the country. Kazakhstan might set a good example of a regional campaign against gout guided by specialists' training needs and reliable epidemiological data collection.

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Authors' reply

We appreciate the interest of Chokan Baimukhamedov and Galymzhan Togizbayev in the Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) estimation process and welcome the opportunity to raise awareness of the need for collection of country-level primary data, in particular for rheumatological conditions such as gout.¹

It is important to note that data sparsity is a limitation of the GBD overall, and the principle and rationale of the GBD is to overcome this limitation through validated statistical models. As commonly reported, it is GBD policy that when data are sparse or unavailable, an uncertain estimate is preferable to no estimate—no estimate is often taken to mean that there is no health loss from that condition. The statistical methods used in GBD and the use of covariates that borrow strength across time and geography should improve prediction when data are sparse. When a wide uncertainty interval exists, this signifies that less data are available, or that the data sources differ from one another.²

The GBD location hierarchy consists of seven super-regions, 21 regions, and 204 countries and territories, and was constructed by grouping together countries based on geographical proximity and shared epidemiologically relevant characteristics (eg, under-5 mortality rates or income level). Although differences such as history and religion are factors, it is the epidemiologically relevant factors that are taken into consideration in the grouping process.

We are pleased to hear of the advances in rheumatology care within Kazakhstan, and acknowledge that with the increase in ability of diagnosis of gout and other rheumatological

conditions, the number of cases is likely to increase. As we acknowledged,¹ our forecasting models did not account for specific risk factors or changes in case identification over time, so the true number of gout cases might be higher than predicted in regions such as central Asia, where these changes are seen. This possibility again further highlights the need for the collection of more primary data over time.

We encourage Chokan Baimukhamedov and Galymzhan Togizbayev to join our GBD Collaborator Network, a global network of more than 12 000 individuals from 163 countries and territories, who contribute to the GBD in crucial ways. GBD Collaborators strengthen the input data, methods, and estimates, collaborate on scientific publications, and help disseminate and apply findings to inform future research, policy, and practice. As we have highlighted the data sparsity as a limitation and emphasised the need for data collection, GBD Collaborators in the central Asia region can directly contribute to improving the estimates of disease burden, including gout.

The declaration of interests remains unchanged from the original Article.

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