

## Improving telemedicine and in-person management of rheumatic and autoimmune diseases during and after COVID-19 pandemic outbreak. Definite need for more Rheumatologists. Response to: 'Can telerheumatology improve rheumatic and musculoskeletal disease service delivery in sub-Saharan Africa?' by Akpabio *et al*

The letter by Akpabio and colleagues<sup>1</sup> raises an important question and describes an interesting scenario related to their geographical area. However, this scenario can easily be applied to several other experiences. In fact, the situation described by Akpabio and colleagues<sup>1</sup> with regard to rheumatological centres being located in great urban areas as compared with the shortage of these specialists within their periphery is quite frequent.

The impact of the COVID-19 pandemic on everyday practice gives us an opportunity to speed up the development of the process already known as telemedicine, which may be an attempt to correct some of these disparities.

The authors of the letter indicate many and relevant suggestions which we find very adequate and deserve immediate consideration. In particular, during this phase, we feel that it is necessary to manage this development. What can this mean? First of all, it should be outlined that telemedicine does not mean reduced need for specialists. Each one of us has experienced the burden of this approach. Telemedicine, as compared with the traditional inperson medical consultation, means greater effort in terms of more complex visit planning, of time spent, of organisation (detailed patient charts and imaging adequately saved and readily available), of mental engagement (need for greater effort in attention) and finally in terms of responsibility.

Dr Akpabio and coworkers outlined the dearth of rheumatologists in sub-Saharan Africa.<sup>1</sup> This is in line with several evidence from other countries where, despite the rising number of rheumatology fellowship programmes, the presumed need for rheumatology personnel expected by 2030 will not be satisfied.<sup>2</sup>

These data are also in line with those from Southern Italy regions such as Campania, where rheumatologists are lacking both in the peripheral areas and city clinics and hospitals. Already in 2019, the Italian Society for Rheumatology outlined that the number of physicians in Italy to be trained as specialists in rheumatology is inadequate and has to be defined on the basis of care needs and of the number of patients with rheumatic diseases, which in Italy is about nine million.<sup>3</sup>

In more detail, in Campania, despite the increase in medical students in recent years, the number of rheumatology fellowship programmes remains insufficient.<sup>3</sup> For example, in our medical school (University of Naples Federico II), over 300 medical students start a bachelor's programme in medicine each year and only two rheumatology fellowship positions (0.66%) are provided yearly.

The COVID-19 pandemic has highlighted the need for more specialists in rheumatology for two further reasons: first, more rheumatologists are required due to increasing physician turnover, and as said for implementing and improving both telemedicine and inperson visits.

In addition, as COVID-19 vaccination is planned, increasing the number of rheumatologists could be essential for the management of antirheumatic therapies in severe COVID-19

cases experiencing cytokine storm conditions, in collaboration with the first medical line involved in the pandemic.<sup>3,4</sup>

Dr Akpabio and coworkers have also highlighted how rheumatology services are mostly centred in urban tertiary academic hospitals.<sup>1</sup> Telehealth has to be focused on providing care, and the use of telemedicine to support long-distance or the practical impossibility of inperson care has increased strongly in parallel with the COVID-19 pandemic.<sup>5-7</sup>

Each Italian region, including Campania, has tried to implement remote assistance systems above all to manage patients with chronic and rare diseases and to guarantee continuity of care even remotely—in some cases with telephone instant messaging or email-based and video consultations and in other cases with the help of ad hoc platforms.

Telemedicine and virtual software have decreased emergency room visits, safeguarding healthcare resources and decreasing the spread of COVID-19 by remotely treating patients during the COVID-19 pandemic.<sup>5,6</sup>

On the other hand, the current focus of healthcare systems on the COVID-19 pandemic, the non-availability of telemedicine in several places and delayed infusions have seriously reduced the quality of care for chronic rheumatic diseases, especially for severe ones that need strict monitoring.<sup>8</sup>

The COVID-19 pandemic has dramatically changed several aspects of rheumatology and of other branches of care. We think that in this era there is a need more than ever of experienced rheumatologists to improve telemanagement and face-to-face management of rheumatic and autoimmune diseases and for the management of patients with COVID-19.

Finally, this innovative approach can be critical in the general effort aimed at early recognition and treatment of rheumatic diseases. It could facilitate the identification of adequate clinical profiles that require such an approach. Identification and description of these profiles could be implemented with the aim of using them for telemedicine consultation. For example, we could easily imagine such an application in the field of osteoporosis. The clinical profiles already identified for drug reimbursement in primary and secondary osteoporosis by the Italian Agency for Drugs could easily represent a template to generate, in analogy, similar clinical profiles deserving early treatment in other rheumatic diseases.<sup>9</sup>

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