

## Scientific research output and medical practice outside of large centers

The heterogeneity in the geographical distribution of medical professionals in Brazil is well known. Irrespective of the percentage of doctors in public services or private institutions, the high concentration of doctors in large capitals contrasts with the shortage of doctors in more remote locations.

It is known that this population also requires medical attention. With a focus on public health, the government has sought to address the situation with financial incentives for professionals to practice in remote locations, and has even taken certain controversial measures, such as facilitating the arrival of foreign doctors. In terms of complementary and private health, the prospect of a lower concentration of professionals in a given region could improve the professional's individual financial performance.

However, capital gain alone does not appear to be the determining factor. As mentioned above, financial incentives, such as comparatively higher wages, have been introduced to motivate physicians to practice in areas that are far from major centers; however, this strategy has not resulted in the desired effect.

Therefore, other reasons may be contributing to the limited migration of skilled professionals into the interior of the country. Consider the example of a newly graduated plastic surgeon who had adequate opportunities for training during his residency and who then found that the job market was saturated in the big cities at the end of his schooling. What makes him remain in this situation and experience such unfavorable working conditions? The lack of infrastructure outside of the major centers may be an explanation for the lower interest in the migration of professionals, who prefer practicing in several big cities rather than in the rural areas with inadequate working conditions. Particularly with regard to specialists, the inability to practice medicine without the use of advanced technology may be a relevant factor. In contrast, the development of modern public or private hospitals that are located far from the cities have not had the expected impact. It is difficult to find professionals to work in these centers as well, and there is still a disparity between the number of vacancies and suitable candidates. Even when financial stimulus is provided to professionals to work in such advanced remote centers, the response of professionals is still less than expected.

Greater access to information in large cities, where a larger number of scientific and cultural activities occurs, may contribute to the decision of professionals for wanting to remain in major centers. However, this justification has weakened due to the greater dissemination of knowledge through electronic means, such as simultaneous transmissions, interactive science activities, and open access to scientific journals. Through this dissemination, knowledge is more widely available and easily accessible, and it now comes at a lower cost.

Therefore, we note that a better quality of life, better wages, and appropriate working conditions have not been sufficient to motivate the professional to abandon the active, stressful, but socially interesting, life of the big city.

Interpersonal scientific activities are recently being popularized and occasionally become events of both a scientific and social nature. This might be an important point to consider. Social contact among professionals is a very important factor in the life of a doctor, as it facilitates the exchange of information or expands his network of contacts. It is possible that the professional who works outside of the major centers feels isolated, without any face-to-face contact, and may thus feel as though he has been "forgotten" by his peers.

Although there is much admiration and respect associated with certain popular professionals in our areas of specialization, these are not related to the location of the professional. Both in Brazil and worldwide, there are several outstanding professionals who are well known and respected from a scientific perspective and who practice in their clinics or hospitals in small towns. However, these cases are different. They publish their work! In this manner, they can perpetuate their ideas, consolidate knowledge, disseminate this knowledge to important institutions worldwide, bridge distances....and live well.

**Dov Charles Goldenberg**

Co-editor