

# Nuclear medicine in the Brazilian Unified Health System

*A medicina nuclear no Sistema Único de Saúde no Brasil*

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The article published by Pozzo et al.<sup>(1)</sup> in the present issue of **Radiologia Brasileira** approaches interesting and intriguing aspects of the situation of nuclear medicine in the Unified Health System (SUS). Firstly, the article observes that, apparently, the Datasus register system lacks reliability, considering that a significant number of nuclear medicine apparatuses registered in such a data system of the Federal Government (440 out of 875 registered apparatuses) would be incorrectly categorized, since they are not included in the Comissão Nacional de Energia Nuclear (CNEN) databank and therefore would be installed in dental and/or radiological clinics which, theoretically, do not have nuclear medicine services. However, on the basis of the mentioned study, it is not possible to identify the exact reasons for the discrepancies observed between the two databanks. It is worrisome to recognize that there are clinics and laboratories charging SUS for nuclear medicine services and that are not registered and/or licensed at CNEN. The integration of those two databanks is essential to identify the reasons for the difference in the number of registered services authorized to perform nuclear medicine procedures for SUS. The finding that there are services registered at CNEN but not included in the Datasus databank may be explained by the fact that such services only perform procedures in the sphere of supplementary healthcare or as private healthcare providers.

Another aspect that draws the readers' attention is the huge lack of government-owned services to provide nuclear medicine procedures to the Brazilian population. Among all services performing scintigraphic procedures, only 6.3% are public. Equally, 82% of the total of almost 393,000 diagnostic procedures supported by SUS were performed by private services. In the Northern and Mid-western regions, it is observed that such procedures are almost exclusively performed by private for-profit institutions.

This corroborates a fact that is already quite known in the healthcare field in general, where the resources allocated to the public health system are limited as compared with other countries where healthcare is considered a priority in terms of investment. The Brazilian Unified Health System could be considered successful as a concept and proposi-

tion. Having healthcare for free is a constitutional right of Brazilian citizens. However, providing citizens with quality healthcare is a huge challenge that SUS is currently facing.

Several problems have called SUS into question. Some of such problems include the heterogeneity in the regional distribution of physicians in Brazil as a whole; the shortage of hospital beds, the lack of resources in the public healthcare sector as not only the amount of resources allocated to the public health system is considered proportionally to the Brazilian gross domestic product. As the number of physicians available in the Northern and Northeastern regions is compared with the number of physicians in the Southern and Southeastern regions, one can notice the discrepancies between regions. In the Northern region, there is about 1.01 physician per 1,000 inhabitants; in the Northeastern region, 1.22 in contrast to the Southeastern region, with 2.6 physicians, and the Southern region, with 2.09. As the more distant areas are evaluated without considering the great capitals and cities, such figures become even more dramatic. In the field of nuclear medicine, there are currently 499 specialists in throughout the country. This represents only 0.24% of all registered specialist physicians in Brazil. The greatest majority of such specialists are concentrated in the great capitals, particularly in the Southeastern region, with 180 nuclear physicians (37%). Therefore, despite all efforts of academic and university centers, as well as of both public and private services that promote professional training programs accredited by Colégio Brasileiro de Radiologia e Diagnóstico por Imagem (CBR) (Brazilian College of Radiology and Imaging Diagnosis) and by Sociedade Brasileira de Biologia e Medicina Nuclear (SBBMN) (Brazilian Society of Nuclear Medicine and Biology), one can observe a remarkable heterogeneity in the distribution of nuclear physicians throughout the different regions of the country.

Another deficiency we can notice and that may partially explain the results reported by Pozzo et al. is the shortage in the nuclear medicine infrastructure at SUS hospitals and services. This is more critically significant and noticeable at university hospitals in some regions of the country, where a considerable percentage of institutions do not have installed and operational nuclear medicine services, neither updated instruments nor professional staffs sufficient to develop and disseminate the specialty. The lack of university health ser-

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vices aimed at not only educating new professionals, but also at disseminating the knowledge among graduate and post-graduate students and among peers in different clinical specialties, may possibly contribute to this scenario. However, it is important to recognize the relevance of either for-profit or non-profit private health services, particularly in certain Brazilian regions, which have played a prominent role in the assistance to the population and also in the dissemination of knowledge both inside and outside the specialty, particularly in the absence of significant investments in the public sphere.

A fundamental aspect to be taken into consideration is to evaluate whether the amount of resources is being sufficient to meet the necessities of a comprehensive and quality assistance to be provided by SUS. The Brazilian government reserves 4% of the gross domestic product to be applied in the public health system, and this amount is too small as compared with some developed countries or even with some other developing countries. However, besides the is-

sue of limited resources, the management of such resources must also be improved. A goals and results oriented management is still to be implemented and should be a mandatory priority in centers more compromised with the use of public resources.

As reported by the authors of the mentioned article, investments in the construction of a Brazilian multipurpose reactor to meet the domestic necessities of basic nuclear materials utilized by the specialty might certainly help in the development and growth of the specialty in the country. However, first of all, it is necessary to make investments in education and in the strengthening of the modality at university centers in most regions of the country, besides allocating resources to meet the necessities of infrastructure of the regional health services.

#### REFERENCE

1. Pozzo L, Coura Filho G, Osso Júnior JA, et al. O SUS na medicina nuclear do Brasil: avaliação e comparação dos dados fornecidos pelo Datasus e CNEN. *Radiol Bras.* 2014;47:141-8.