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e Serviços de Saúde

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TRANSLATIONAL RESEARCH AND THE CONTRIBUTION OF CLINICAL PHARMACISTS TO HEALTH SERVICES

Elisangela da Costa Lima-Dellamora and Matthew Peak

Translating the results of medical research into clinical practice in healthcare services is a considerable challenge faced by health systems^{1,2}. To fill this gap, translational research (TR) has been emphasized as a way to transform the results of basic and applied research into real alternatives for the prevention, diagnosis and treatment of disease^{2,3,4}.

When considering the scope of TR, we tend to think of the so-called 'bench to bedside', which aims, for example, to build a bridge between basic research and the introduction of a new pharmaceutical formulation to the market⁴. Nevertheless, there are other phases of TR such as using the best available evidence in clinical practice, as well as assessing the implementation of new care guidelines in health outcomes^{4,5}. These phases have the utmost importance in the field of pharmacy, especially with regard to pharmaceutical services.

In general, new drugs afford only incremental improvements, and patients may actually gain greater clinical benefit if established therapeutic alternatives are used properly^{4,6}. In Brazil, despite advances in the elaboration of clinical protocols and therapeutic guidelines for high complexity care, serious problems remain owing to pressure in the process of incorporating new health technologies within the scope of the services⁷. Intensive processes of adoption and marketing can be associated with such technologies, which do not always have a health impact but are often in demand from the public and profitable for the industry, entailing methodological challenges to guarantee the safety of patients⁴.

The transfer of knowledge from basic research to application is stimulating and depends on the close integration of researchers and health, government and academic institutions, which is a challenge for most countries⁸. Several postgraduate programs in Brazil and around the world have sought to bring the researcher closer to the field of practice⁹. Nevertheless, Bornstein and Licinio⁸ have highlighted how both the distance between research and clinical practice and their financing by different entities reduce the effectiveness of translation initiatives. In Brazil, this is compounded by the challenge of running a public health system for approximately 200 million inhabitants across 5565 cities with 491,603 hospital beds.

In the United Kingdom, Germany, Australia, Singapore and the United States, the best universities, health services, and medical research institutes have worked together to achieve progress in the way that health care is delivered to the community⁸. Recently, the American College of Clinical Pharmacy underscored the importance of developing capabilities for pharmacists to be able to perform research that meets the growing demands of society¹⁰. TR that incorporates methods in clinical pharmacology can generate new skills that guide the decisions in selecting and following-up drug therapy¹¹. However, there is a need to train pharmacists and to expand the number of graduate programs that encompass this area, as well as increasing the number of qualified mentors¹¹.

In the United Kingdom, the National Institute for Health Research (NIHR) financed a five-year program called Adverse Drug Reactions in Children (ADRIC), resulting in improvements in the management and understanding of adverse drug reactions in both children and adults within the health system¹². Researchers from universities and health institutions in London and Liverpool have developed new tools for assessing the causality and avoidability of adverse drug reactions, in addition to developing better strategies for communicating with the families of patients when an adverse drug reaction is suspected. The role of clinical and research pharmacists in study design, study implementation and data interpretation is essential in such research programmes.

On the one hand, the academic output in the first phase of TR has shown exponential growth⁵. On the other hand, the output of other phases has been sometimes slow, although it is apparent as protocols, guidelines and handbooks of great importance for the health system⁸. In addition to the required efforts in inter-institutional cooperation and financing of these studies in Brazil, scientific communication journals in this field also are needed. In this respect, the Brazilian Society of Hospital Pharmacy and Health Services (RBFHSS), hopes to contribute directly to the disclosure of knowledge derived from TR in health services in Brazil and Latin America.

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