

Clinical Research in Colombia

Specifying the terms and leadership will help to set the course

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Due to recent initiatives, a necessary debate has begun regarding the state of clinical research (CR) in the country. An initial argument emerged from two related professional associations, the Asociación Colombiana de Centros de Investigación Clínica [Colombian Association of Clinical Research Centers] (ACIC) and AFIDRO, which brings together the multinational pharmaceutical industry in Colombia. In turn, various academic institutions in the country have begun to address the matter.

Among the initial arguments expressed is the article titled “State of Clinical Research in Colombia,” published by this journal (1). A similar content was expressed in a letter circulated to ACMI members and reproduced by the Sociedad Colombiana de Cardiología [Colombian Society of Cardiology] on their web page, signed by committees from these scientific societies and ACIC (2). These arguments were also publicized in a forum convened by the Bogotá Chamber of Commerce, sponsored by AFIDRO (3). In fact, this entity presented a National Strategic Interest Plan (PINE, from its initials in Spanish, is a type of instrument instituted by the national government in 2013 through which various entities may propose changes in sector policy) to various levels of the national government which suggests a policy for CR, according to its vision and interests.

The other group of contributions to the debate included declarations from research centers such as the Centro de Pensamiento Medicamentos, Información y Poder [Center of Thought on Medications, Information and Power] of the Universidad Nacional de Colombia (4), and a forum promoted by the life and health sciences focal point of the Mission of Scholars (5). As members of this sector, and participants in some of these expressions, we would like to contribute to the debate by expanding on some related ideas. In this brief article we will refer to the meaning of the first series of initiatives and will describe our vision for advancing in this fundamental aspect of the nation.

Where does an inadequate extrapolation of terms lead to in CR?

In the first place, we need to clarify some of the language to pinpoint its scope and express some fundamental differences with the content of these documents. In their article, Drs. Molina and Álvarez allude to CR in a generic way, both in the title as well as in the first sentence of their introduction. However, in the narrative, CR is limited to clinical trials (CTs), specifically those which evaluate new molecules or therapeutic products. It is essential to add that the pharmaceutical industry not only financially sponsors their studies, but also designs them and directs their performance. The article in mention discusses, under the title of CR, the situation of pharmaceutical industry-led CR (ILCR) and particularly its performance indicators worldwide and in Colombia, in administrative and operative terms, without considering the scientific impact indicators. For example, encouraging results are listed as the number of studies presented and their commercial value, their performance efficiency indexes, the recruitment of participants and adherence to protocols. However, they do not refer to the derivation of scientific publications with the participation of national authors, their impact on bibliometric indexes for Colombian institutions, the contribution to the solution of nationally relevant health problems, or changes in medical practice derived from the research results.

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The imprecise use of some terms which could produce mistaken ideas in the readers concerns us. One of these would be to omit the fact that CR is comprised - perhaps mostly - of studies other than those referred to by the authors (only CTs). Clinical research is also made up of studies which seek to determine the magnitude of clinical or public health problems, those which take on measurement challenges and evaluate the validity of clinical attributes, those which evaluate diagnostic efficiency or those which seek to contribute to the natural history, risk factor identification and prognostic value of some markers of disease progression. Not all CR seeks to evaluate a treatment; not all treatments are medications and, especially, not all CTs are ILCR. These protocols, generally designed to fulfill requirements for approval of the commercialization of medications or devices, are not the ones that best represent the majority of relevant clinical questions needing research. It should be noted that not only are interventions of potential health interest not always pharmacological, but also many research needs, of high public or social interest, may have scant or no commercial interest.

Another necessary language clarification is that the entities termed clinical research centers which INVIMA accredits in Colombia participate in the conduction but not the design, analysis or presentation of results of ILCR. The imprecise use of the term, not just in scientific journals but also in press articles (6, 7), assumes some potentially dangerous attributions which do not reflect reality. The criteria for accreditation of research centers, for which only Colciencias has authority in Colombia, refer to the generation of knowledge and scientific production disseminated nationally and internationally, more than to the provision of services or technological inputs for conducting projects.

Clinical research, with its various indicators of scientific production and clinical problem resolution, cannot be confused with a Specialized Clinical Information Transcription Service (SCITS), which seems to be the activity that actually characterizes the entities known as clinical research centers. In fact, there are very few research centers recognized by Colciencias among the 120 institutions certified with "good clinical practice" in the country. This difference between an operative process and that of scientific activity is essential in determining the social value of the innovation processes which follow research, for the benefit of the final recipients, and, subsequently, intellectual and industrial property rights, if applicable.

With this co-opting of terms, these subtle "language constructions" (to paraphrase a renowned philosopher), a conceptual and political body seems to be traced which overestimates ILCR's contribution to innovation and reduces the immense needs of the Colombian health system to the tailoring of a purely commercial operation. This is why we distance ourselves from the joy and significance which Drs. Molina and Chávez, after hosting a forum organized by AFIDRO and the Chamber of Commerce of Bogotá,

ascribe in their publication to the possibility of transferring this biased conception of CR to a National Strategic Interest Program. This initiative, as currently seen, seeks to exclusively potentiate the ILCR.

How to construct a desirable future for CR arising from Colombian institutions?

We would be just as, or perhaps more, jubilant if we found a similar initiative for the development of a comprehensive policy for all CR in the country, which is overdue. A policy which would be centered on the development of CR arising from Colombian institutions (ICSICOL in Spanish). A policy which would establish the governance of CR in the authorities who direct the scientific and technological innovation (STI) activities on a national level. One in which academic institutions (which currently remain outside of the initiative for conducting clinical trials) and health authorities would have a leading involvement, but to which national and foreign input and technological support services providers would also be invited. A strategy which would have a solid, modern information system to facilitate the definition of priorities for initiating research and an appropriate apparatus for knowledge transfer, to generate innovation based on evidence in our health system.

The juncture of the approval of the anticipated Science and Technology Ministry can create a propitious environment for generating measures to support the construction of this policy. This instrument should consider CR comprehensively, covering its entire spectrum and connecting it in its different phases, taking advantage of its articulating role, and making it more translational. Furthermore, ICSICOL would accelerate and connect the whole spectrum of clinical research on the one hand with our advances in basic research, and at the other end with economic studies and innovation in our health services.

This policy, especially its initial phase, should have as its axis the building of capacity in the institutions which develop ICSICOL (the centers and institutions with research groups recognized by COLCIENCIAS) and the facilitating of joint action with specific departments in the articulating (more than regulating) institutions, such as the Ministry of Health and Social Protection, INVIMA, the National Institute of Health and IETS. Its ultimate goal should be to best inform the areas of uncertainty in decisions regarding individual health care, aiming at increasing the efficiency of our health system as well as the nation's scientific and social productivity.

In terms of governance, the formulation and management of this policy would be assigned to the authority of Science, Technology and Innovation (STI) at the national level, under the joint leadership of Colciencias (or the future Ministry of STI) and the Ministry of Health, and should include the previously mentioned articulating institutions, seeking to build a CR management system. Within this organism, the service providers and providers of inputs and

technological services for carrying out research (health care institutions implementing the protocols, the pharmaceutical and medical device industries, and information management instruments or other technological supports), be they national or international, would be invited to participate.

In terms of financing, an autonomous fund would be implemented, with a majority contribution from the government and additional contributions from external aids (other governments, non-governmental organizations and providers and private technological support service providers), on the grounds of its independence in study design, execution, interpretation and communication of results. To use this fund, the system's governing body would create competitive public tenders or other types of initiatives for human resource development, capacity building, technological and institutional exchange, etc.

In terms of content, the focus of CR priorities should flow from and towards our health system, based on internal inputs (epidemiological surveillance system; monitoring of practices, costs, values and user preferences within the system; the flow of resources and costs within the health system), and should have a solid component of knowledge flow and management which will foster innovation and evidence based clinical decisions. Ideally, this definition of priorities should articulate the local and global needs to reduce the huge gap in the search for healthcare solutions of what is known as the global south.

A consistent view of the academic sector

In the previously mentioned forum on "regulation for health research" we encountered several fortunate coincidences expressed in the participants' presentations (8). The speakers at the forum noted, for example, the need to integrate ethical aspects, critically important in CR, in the processes of the national council on bioethics directed by Colciencias. This would provide a much more appropriate, centralized and, at the same time, multilateral management of the difficult conflicts of interest between sponsors and for-profit contract research organizations on one side, and the clinical sites where the protocols are carried out, with their local ethics committees (which Invima regulates as clinical research centers, dedicated to the SCITS activities described above) on the other. It was requested that these centers, to be considered as such, should meet the same requirements Colciencias has for recognizing research centers. It was also said that, alternatively, these sites could be given the category of service or technological support centers, as a more fitting term.

Likewise, more than one speaker agreed with the need to create a CR financing fund, supplied by different sources, including the payment of a type of administrative commission from the resources invested by multinational industries in the evaluation (but also the publicity and marketing) of their medications and devices. It was requested that every dollar spent by the industry on research for the marketing

approval of its products be taxed, with part of the funds earmarked for resolving priority health questions. While this was considered to be a fair contribution (it was also requested that participants in industry sponsored CTs have perpetual access to the medications developed in the future by the corresponding protocol), these would not replace the major role and guidance of the State, especially at the initial point of investment in STI in the country.

The panelists emphasized the importance of scientific collaboration both nationally and internationally. Joint participation is seen not only as a contribution to efficiency, but also to quality and specialization. Failed research programs in specific areas were recalled, which did not have financial support from Colciencias beyond their initiation. On the other hand, the internationalization of ICSICOL was considered to be useful and productive in terms of quality and scientific visibility, in a world where international multicenter projects give greater external validity to research results. This collaboration, it was said, should be distinguished from a passive execution of protocols, most often in an environment of low scientific participation and protagonism. Real international collaboration, which is very desirable, would distance us from scientific colonialism, limited to the mere exportation of information, with little added value.

Some presentations referred to the need to prepare more human resources qualified in CR. This topic, which would itself warrant an independent forum, requires major modifications in the direction of the clinical specialist training programs. Most research method programs are still general, not taking into account the idiosyncrasies and personal and institutional challenges around CR, with too few existing programs for the country's needs. But, in addition, a change of concept is needed in the incentives for a CR career for health professionals, meeting the need to create and sustain career researchers, if a considerable critical mass of independent clinical researchers is desired.

Finally, public officials from various entities were present at the forum who, among other things, reinforced messages to Colombian institutions which carry out CR contracted by the multinational pharmaceutical industry. They highlighted the importance of co-ownership of the crude data and the urgency of making sure that the professionals who carry out these protocols do not limit their performance to the fulfillment of some recruitment goals. They also called attention to the establishment of conditions for the transfer of real knowledge and called for the protection of first-line treatments to avoid the shortage of established medications.

Conclusion

The country's scientific community does not have the luxury of limiting CR to that which is carried out in order to obtain a marketing license for new medications and devices. The emerging figures of local investment in clinical

research and institutional incongruence around CR differ from the high potentialities to answer more relevant health questions in a better way. The formulation of a needed policy to stimulate a greater, diverse and robust ICSICOL will be the sure way to advance in generating value in our STI and health systems. To opt for this pathway, defining the terms and leadership, clarifies a CR course which will benefit the population, contribute to solving inequities in availability and access to services and treatments, and increase our productivity.

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