

Innovation and technological production in health: a necessary challenge

Inovações e produção tecnológica em saúde: desafio necessário

How to cite this article:

Moreira TMM. Innovation and technological production in health: a necessary challenge [editorial]. Rev Rene. 2024;25:e92629. DOI: <https://doi.org/10.15253/2175-6783.20242592629>

 Thereza Maria Magalhães Moreira¹

¹Universidade Estadual do Ceará, Fundação Cearense de Apoio ao Desenvolvimento Científico e Tecnológico. Fortaleza, CE, Brazil.

Corresponding author:

Thereza Maria Magalhães Moreira
Rua Silas Munguba, 1700, Itaperi
CEP: 60740-000. Fortaleza, CE, Brazil.
E-mail: thereza.moreira@uece.br

EDITOR IN CHIEF: Ana Fatima Carvalho Fernandes



This is an Open Access article distributed under the terms of the Creative Commons

Innovation has been the hallmark of the current century, and this trend has also been observed in Brazilian postgraduate studies in all fields, including nursing, in which we operate. The significant number of methodological works in our field is compelling evidence of this trend. This type of study examines, organizes and analyzes data to construct, verify validity and evaluate Technologies⁽¹⁾. The construction of technologies and the verification of their validity evidence are recurring themes in theses and dissertations from academic and professional programs. As a result, the number and variety of technologies developed and tested in these works are increasing daily. However, there is still a need to discuss fundamental elements of these constructions in terms of their purpose and scope in everyday care in different settings.

It is important that these technologies have a broader purpose. In this regard, the Sustainable Development Goals (SDGs) are a good guide. These goals are a global call to action to end poverty, protect the planet, and ensure peace and prosperity for all. Nevertheless, there is still a need to discuss fundamental elements of these constructs in terms of their purpose and scope in the day-to-day delivery of care in different settings.

In this sense, the Coordination for the Improvement of Higher Education Personnel has compiled a list for all areas of what it considers technical production: 1) social technology; 2) professional training course; 3) software/application; 4) manual; 5) experimental technological protocol/application or technological adaptation; 6) map; 7) technical-scientific database; 8) communication product; 9) confidential

products/processes; 10) taxonomies; 11) non-patentable process/technology and product/material⁽²⁾. This list describes what was found in the reports from Brazilian postgraduate programs. Four years have passed since this description and given the pace of technological progress and the retrospective nature of the list, it is obvious that it needs to be updated. In the daily activities of postgraduate courses, when teaching subjects related to this topic, it is common to find that Master's and Doctoral students struggle to adapt their products to the classificatory system mentioned above.

In light of the above, beyond the need to update the list, there is a need to rethink what we are doing and where we are going. Therefore, it is both relevant and imperative to evaluate the actual utility and safety of the technologies produced, while at the same time contextualizing the validity of the innovative technology and surrounding it with appropriately safe and accurate testing procedures when assessing its technological validity. In addition, it is essential to thoroughly review all available literature on the subject. After all, how can you safely create something new without a thorough understanding of what already exists? Thus, successful exploration of new ideas requires exhaustive research and familiarity with the products and processes available in the marketplace, as well as the methodologies used to test their validity. Are we willing to pay that price? It is critical that we are clear about this, both individually and as a field. In addition, the country needs to address the challenge of maintaining open access to current and high quality scientific literature within universities.

Nevertheless, the return on such an effort is indeed feasible, given the numerous opportunities for innovation in today's context, where Internet communication and the consumption of new technologies are taking place at an accelerated pace. An undeniable proof of this is that the sale of a new drug by a pharmaceutical company can propel a country to the top of the stock market and have an impact on its gross

domestic product. This illustrates the sheer power of innovation and technological production in health care. Innovation allows countries to increase employment and income⁽³⁾. What have we done and what will we do in the coming years to acquire and manage this power? And what is the extent of the power of our current creations? We cannot avoid this discussion.

The speed of Brazilian science needs to increase because we have public policies and guiding elements, among which the National Agenda of Health Research Priorities and the organization of the Science and Technology Week stand out, but both require constant updating. In addition, it is crucial to consider Brazilian science as an investment and not as an expense, to treat it as a priority in budgets and not as a leftover. Therefore, the creation, management, and evaluation of our health technologies, as well as the monitoring of the technological horizon, contribute to services, municipalities, states and countries, proving to be a necessary and relevant activity for postgraduate studies, scientific fields in the country and for Brazil.

References

1. Polit DF, Beck CT. Fundamentos da pesquisa em enfermagem: avaliação de evidências para a prática de enfermagem. Porto Alegre: Artmed; 2018.
2. Coordenação de Aperfeiçoamento de Pessoal de Ensino Superior. Produção Técnica [Internet]. 2019 [cited Nov 13, 2023]. Available from: <https://www.gov.br/capes/pt-br/centrais-de-conteudo/10062019-producao-tecnica-pdf>
3. Moreira TMM, Loureiro AMO, Borges JWP. Pesquisa metodológica e inovação tecnológica em gestão e saúde coletiva. In: Jorge MSBJ, Vergara CMAC, Sampaio HAC, Moreira TMM (Org.) *Tecnologias e-Health em Gestão em Saúde: fundamentos para seu desenvolvimento e avaliação* [Internet]. Curitiba: CRV, 2021. p. 39-48 [cited Nov 13, 2023]. Available from: <https://www.editoracrv.com.br/produtos/detalhes/36281-tecnologias-e-health-em-gestao-em-saudebr-fundamentos-para-seu-desenvolvimento-e-avaliacao>