



The 2023 Nobel Prize and vaccine hesitancy

O Prêmio Nobel 2023 e a hesitação vacinal

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The role of vaccines in reducing mortality and containing the spread of the COVID-19 pandemic received well-deserved recognition from the international scientific community when Hungarian biochemist Katalin Karikó and U.S. immunologist Drew Weissman, of the University of Pennsylvania, were awarded the 2023 Nobel Prize in Physiology or Medicine. Karikó and Weissman's discoveries about nucleoside base modifications made possible the development of effective mRNA vaccines against SARS-CoV-2, at an unprecedented speed, during the greatest health crisis of the century¹.

This major victory of science is especially significant for Brazil, where the National Immunization Program (PNI, from the acronym in Portuguese), a world-renowned example of success in vaccination, has faced a concerning decline in vaccination coverage rates in recent years due to vaccine hesitancy – defined by WHO as one of the main threats to the health of populations².

Within this context, the present issue of AAI features a special article by Professor Dr. Jorge Kalil, one of the key figures of vaccine research and development in our country. His review covers historical aspects, different vaccine platforms, and the epidemiological situation, major challenges, and future perspectives for the development of vaccines targeting

some of the most prevalent infectious diseases in Brazil. Professor Kalil's unique vantage point, reached through personal experience acquired over decades of work in the field of vaccine science, makes this review essential reading³.

Another special document in this AAI issue is the "Practical guide for the use of immunobiologic agents in allergic diseases", prepared by the Scientific Department on Immunobiologics of the Brazilian Association of Allergy and Immunology (ASBAI). The concept of targeted therapies and precision medicine in the treatment of patients with serious allergic conditions has already been incorporated into the daily practice of the allergy and immunology specialist. This highly objective guide was designed to aid the specialist in prescribing biologics, and covers everything from indications, dosage, efficacy, and safety to the more practical aspects of storage, administration, and how to obtain these agents. It is sure to become a valuable work of reference for all physicians who care for this patient population⁴.

Also in this issue, "Starting a practice in Allergy & Immunology: what do I need?" is the first in a series of special articles prepared by the ASBAI Statute, Regulations, and Standards Committee that will be published in AAI. Its main objective is to provide an overview and guidance on the essential steps for best

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practice in the clinical care of allergic patients in the private office and clinic setting. These issues are rarely addressed during specialist training in allergy and immunology, and this important document – carefully based on the most recent rules and regulations for providers and facilities involved in the practice of our specialty – has been designed to bridge this knowledge gap⁵.

Among the original articles in this issue, we highlight the winner of the 2023 Oswaldo Seabra Prize, awarded at the 50th Brazilian Congress of Allergy and Immunology, held in the city of Maceió. This study by Braian et al. used a large Ministry of Health database (SIVEP-Gripe) to assess outcomes of asthma patients hospitalized with severe acute respiratory infection (SARI) during the COVID-19 pandemic. Despite the limitations inherent to cross-sectional studies and secondary, the authors were able to detect discrepancies in mortality across different age groups and regions of the country, in addition to the predominance of COVID-19 among all SARIs associated with fatal outcomes during the period of analysis⁶.

We hope you will enjoy the wealth of content published in the last issue of AAAI for 2023. We wish our readers a new year filled with achievements... and vaccines for everyone!

References

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