



## Message

In the current landscape of health innovation, one is increasingly prompted to ask a simple question: who is making the drugs? A striking shift is underway, as growing numbers of medical doctors, across specialties from internal medicine and surgery to dermatology, are now formulating and, in some cases, manufacturing natural-based products that are presented as scientifically substantiated supplements. The pace of this transition is rapid, and it feels as though a “giant” has been awakened; perhaps it has. Four decades ago, such clinician engagement with phytomedicines and herbal products was far less common. It was often difficult to persuade physicians to engage seriously with presentations on natural products research, let alone to participate in development activities. Today, the tables have turned. Clinicians increasingly collaborate with pharmacists, pharmacologists, analytical chemists, and other scientists to develop these same categories of products.

Yet the language and regulatory classification of these preparations remain inconsistent worldwide. Depending on the country, an identical formulation may be regulated as a medicine, a dietary supplement, a food with health claims, or even a cosmetic. In many cases, the label applied reflects the pathway needed for market entry rather than the strength of clinical evidence supporting safety and efficacy. This variability has consequences: it shapes manufacturing standards, permissible claims, post-market surveillance expectations, and ultimately the degree of protection afforded to patients and consumers.

Concurrently, public and professional discourse is being reshaped by the rapid expansion of artificial intelligence (AI). AI-enabled tools now influence multiple stages of pharmaceutical and natural products research. As AI touches more of the development pipeline, questions of authenticity, accountability, and trust become more prominent. Will patients hesitate to use a product developed with AI-assisted methods? The answer may be complex, but current signals in mainstream media and public commentary suggest a persistent expectation: human expertise must remain visible and accountable in sensitive, high-stakes domains such as drug development, clinical decision making, and medical technology.

For pharmaceutical science, this moment represents both opportunity and responsibility. On the opportunity side, AI can compress early discovery timelines, reduce experimental redundancy, and support quality-by-design approaches that improve reproducibility. In natural products research specifically, computational methods can enhance dereplication, chemoinformatics, and rational prioritization of extracts and compounds, helping investigators move more efficiently from complex mixtures to plausible leads. If used responsibly, these tools can strengthen, not weaken, the evidence base and improve decision-making across the research pipeline.

However, acceleration must not outpace rigor. “Natural” is not synonymous with safe, and “supplement” is not synonymous with effective. Persistent challenges include variability in raw material sourcing, the risk of adulteration, batch-to-batch inconsistency, and claims that extend beyond the available data. Where regulatory frameworks permit market access with limited preclinical characterization or minimal clinical substantiation, the burden shifts to researchers, professional bodies, and journals such as UJPR to insist on higher standards of method and reporting.

In this context, the Universal Journal of Pharmaceutical Research (UJPR) remains committed to publishing and promoting rigorous pharmaceutical research across all areas of the discipline and related interdisciplinary fields.

As this “giant” awakens, the central task is not merely to produce more products, but to produce better science. The credibility of our field will be determined by whether we can pair innovation with accountability: clear definitions, sound methodology, ethics, and claims that are aligned with data. This is the standard UJPR has been championing, and it is the conversation this issue invites now and in the future.

**Prof. Olanrewaju Rita-Marie Awotona (Retd)** 

Former Dean, Faculty of Pharmacy, Niger Delta University  
Wilberforce Island, Bayelsa State, Nigeria.



[lanreawotona@gmail.com](mailto:lanreawotona@gmail.com)