BRIDGING THE PHARMACEUTICAL INDUSTRY-ACADEMIA GAP: A PANACEA TO NIGERIA ECONOMIC INSTABILITY

Welcome to the "World of Pharmacy". A global village of health professionals with the primary duty of maintaining "good health" across Nations through her intensive health-related "Academia Research" and practical completion of the "medicine-making" process through her industries (Pharmaceutical Industries).

The efficiency of this field as well as the efficacy of its products greatly depends on the interaction and/or cooperation between its Industry and its Academia.

The "gap" between the Pharmaceutical Industry and Academia is a major limitation to the growth and overall influence of this field across so many Nations of the world - Nigeria in particular.

Pharmacy as a field has contributed greatly to the growth and stability of the economy of so many Nations of the world. It is sad that we are yet to experience the full "Economic Potential" of this field in our country. Except for the few internationally recognized Pharmaceutical industries in Nigeria, our local industries are yet to attain an international standard.

Ignoring the problem that there is a growing gap between Academia and Industry will only hurt our economy further and leave more people unemployed.

Looking at the current relationship between the duo, there seems to be a "disconnect" on many grounds.

Academics and Industrialists appear to have a differerent mindset.

While Industry focuses on finding the fastest way of producing medicine for a recent disease outbreak, Academia focuses more on extensive research to arrive at a relatively long term solution.

While Industry is concerned with "acquiring information" that will aid in cutting costs and maximising profits, Academia seems to be concerned with "acquiring knowledge" and enjoying prestige from her publications.

There is a claim that Academia is partly ignorant of the constraints faced by Industry because Academics mostly ignore Industrial conferences.

Cooperation between the Pharmaceutical Industry and Academia is vital.

"The world of Pharmacy lives and breathes translational research. She transforms knowledge of a potential drug target into a medicine for patients around the world." (Article in atsjournal.org).

A combined efforts of the duo is what actually results into highly efficacious products and the efficiency of the "**Pharmaceutical World**".

In the past, the basic molecules that served as drugs were actually discovered serendipitously. However, I would like to say, "welcome to 'today' where most drugs are actually 'invented' as opposed to being 'discovered'."

Both parties play a vital role in the "medicine-making" process.

The Academia embarks on crucial "basic science research" aimed at identifying potential targets for drug invention.

Once the drug target is validated. The Industrialists spend the next few years screening compound collections or natural products, then synthesizing new molecules and testing them in <u>biological assays</u>. Once the results are deemed satisfactory, a new drug is born.

There are many ways the Pharmaceutical Industry-Academia gap can be bridged.

A market-driven approach to higher education has to be encouraged in order to improve manpower development from the grassroot level. "Basic researches" should be carried out with a mindset of applying the discoveries made in solving real life problems.

Philip Hench and his partners worn a noble prize for the *discovery and clinical application* of corticorsteroids.

This achievement comes from a market-driven approach to higher education and clearly shows unity in the Industrial and Academic aspects of Pharmacy.

Joint Conferences by Professionals in Industry and Academia should be encouraged. The Industrialists should state their experiences and the challenges faced in the industry. Debates, video shows of some industry projects and trips to various industrial companies should be encouraged. This will help foster the relationship between the duo.

Active participation of the industrialists in beneficial Academic researches should be promoted.

When necessary, the Industrialists may choose to finance extensive Academic researches.

Programs such as Continuing Education Programs (CEP) which encourages industrial participation in Academic studies should be encouraged. Industrialists may make use of school laboratories that may be better equipped than those in some industrial setups. This way, the duo gets to work hand in hand.

Effective intervention of Academia in solving Industry problems should be encouraged.

Academic institutions can help the industrial companies by providing consultancy services which are sought by small-scale entrepreneurs having no access to R&D (Research and Development). It can be in the form of evaluation of products and processes. (Article in thegradstudentway.com).

More Internship Opportunities and Entrepreneurial Competitions should be set up to build the "practical wit" of potential Pharmacists; making them better equipped - not just in theory but, in practice too.

Bridging the Pharmaceutical Industry-Academia gap will have a significant effect on "fixing" the Economic Instability of Nigeria.

Official statistics suggests that Nigeria - which holds the position of the most populous country in Africa - has one of the highest incidents of <u>malaria</u>, <u>poliomyelitis</u>, <u>tuberculosis</u> and other similar diseases. It is therefore not farfetched to say that Nigeria is a **vibrant Pharmaceutical market**.

A healthy Cooperation between the Pharmaceutical duo would lead to Economic growth as more efficacious "drugs" are released into the vibrant market.

Before I drop my pen, I would like to say that it is critically important for Industry and Academia to collaborate.

Francis Peabody said, "The secret in care of the Patient is actually caring for the Patient."

Once upon a time, the number of deaths resulting from cardiovascular diseases in the United States was increasing in a runaway mode. *It took a healthy cooperation of Industry and Academia to save lives* through the <u>introduction of statins</u> and other innovations.

Introduction of so many <u>vaccines</u> and the <u>anti-HIV medicines</u> are also great public victories achieved by a healthy cooperation between the duo.

The **Pharmaceutical Association of Nigerian Students (PANS) - NAU AWKA Chapter** especially - is doing a great job by organizing a platform where sensitive issues like this are discussed. As students across various levels air their views and offer opinions, we drive closer towards bridging the unhealthy Pharmaceutical Industry-Academia "gap" - a panacea to the Economic Instability of our beloved country, Nigeria.