

Towards self-sufficiency in pharmaceuticals

Most of our Pharmaceutical manufacturing agencies are yet to be 'original' in terms of finished products and this flaw has turned our nation into a dumping ground for fake and adulterated drugs.

DESPITE our abundant human and natural resources, lack of articulate planning, prudent management and rendering of selfless services have remained some of the major impeding factors to the much desired technological advancement especially in the health sector.

This is because the culture of providing for the rainy day is not with us. There is therefore a retarded progress in the area of developing or tapping the medical values of the nation's abundant herbs.

Some basic or preliminary investigations have been conducted on a good number of Nigerian herbs which indicates that many of them could find a place in the treatment of different types of ailments prevalent in the tropical environment. They could also serve as additives in the formulation of different Pharmaceutical dosage forms.

Soya beans is grown on subsistence level in many parts of Nigeria, which has encouraged some government sectors to contribute towards its large scale production in recent times. A gum derived from the edible seed of this plant has been found to be suitable as an agent in formulation of suspensions and creams. A chemically modified product of this gum (musol) has been shown to be a very useful excipient (direct compression vehicle) in tabletting.

Dika fat, a solid vegetable notable lubricants (agent

which prevent sticking and/or enhances free flowing in tabletting powders) used in formulation for tablets. Stability and compressibility tests indicate that this fat is compatible with many drugs and tablet excipients.

One of the approaches to control of schistosomiasis (a fluke worm infection which affect mainly the veins of the bladder, liver and alimentary tract) and other snail-born diseases of human and livestock is the destruction of the intermediate snail host.

Though there are effective synthetic agents, these are very expensive and highly toxic to non-target organisms and have harmful long term effect. These effect prelude their wide applications.

But the issue of plants with these properties is however simple, inexpensive and safe, and on the basis of this some Nigerians medicinal plants have been investigated. Extracts from some of the plants passed the World Health Organisation's (WHO) preliminary test for molluscicidal activity.

Euphorbia heterophylla linn, a weak annual weed which grows abundantly in cassava plantations has been evaluated for its medicinal values. It has been shown to exhibit purgative action, this being due to its ability to increase the propulsive movement of the intestinal contents leading to expulsion of faeces.

These reports represent just a few examples of studies which have been undertaken at the university

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of Nigeria, Nsukka, the Ahmadu Bello University Zaria, Obafemi Awolowo University Ife, University of Benin and University of Lagos, where many of our indigenous plants were evaluated. The indication is that some contain therapeutically active substances which could be used in the control/

Pharmaceutical product development is a time, energy and money consuming project but a worth-while exercise to embark upon. Suffice it to say that, these factors must be integrated appropriately in a bid to attaining self-reliance in Pharmaceutical production. A good research laboratory is of course a pre-requisite for product development because it affords suitable arena where

faculties/schools of Pharmacy, with a view to developing potential active medical substances into suitable dosage forms.

Over the years Pharmaceutical companies based in Nigeria especially the multinationals have shown non-challant attitude towards harnessing and developing local raw materials. It is on this note that one sees the need for a time limit to be given to these companies to look inwards and develop a high percentage of their raw materials from our vast natural resources.

A way of accomplishing this is for them to sponsor, potentially viable projects at our tertiary institutions of learning or allied institutions. These multinational companies must work appreciably towards improving local raw materials base for the drug manufacturing companies in this country. One would like to commend the effort of Chief M.K.O. Abiola for sponsoring some experts of NIPRD to China to

While we may start with equipment of foreign origin, there is the need for concurrent designing and development of local machines/instruments for Pharmaceutical production, the engineering department of our tertiary institution, Project Research Development Agency (PRODA) based at Enugu and other similar establishments will be of immense importance.

The federal government is expected to expedite action towards the completion of Ajaokuta Steel Complex which will provide the necessary working materials for the engineers.

At the moment, Nigeria produces only about 20% of the drugs and dressings consumed in the country thereby making the country a dumping ground for a handsome number of fake and adulterated drugs. While it is obvious that the anticipated petrochemical industry will constitute a boom for the Pharmaceutical raw material base in Nigeria, there is need for positive



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treatment of epileptic seizures, sickle cell anaemia, hypertension, malaria fever, skin infections and a host of other ailments.

However, development of such potentially active medical agents into suitable dosage forms has remained rudimentary.

ideas are conceived.

The setting up of the National Institute for Pharmaceutical Research and Development (NIPRD) at Idu, Abuja is a step in the right direction, the institute will play a major role in harnessing research findings from the various

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understudy the use of Chinese herbs in treatment of various ailments.

Development of indigenous Pharmaceutical products would be a farce if the equipment are lacking.

investment in the development of raw material from our sound natural resources.

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