

## Retailing in Traditional and Herbal Medicine: Facts and Future

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The use of plants and plant-based products in the treatment of diseases is as old as mankind. The plant, animal and mineral products constitute the natural products, which have been the basis of different traditional systems of medicines and practised since time immemorial. These systems are still being practised in developing countries, in recent era even in modern and developed countries, along with modern allopathic medicine. According to WHO (World Health Organization) more than 80% of world's population still relies on traditional systems of medicine.

Several traditional health care systems of medicine are being practised in Indian subcontinent. The most commonly used one are Ayurveda, Siddha and Unani system of medicine. In India, up to several decades ago the medicines used in indigenous systems of medicine were generally prepared and sold by the practicing physicians themselves. In recent decades these practice has been largely replaced by the development of organized herbal drug industry and retail pharmacy. During the course of time, the formulation strategies of traditional medicine have also undergone some changes to cater the needs of today's patient, to gain the patient's compliance and to improve the product appeal as compared with allopathic medicine. From traditional formulations like decoctions, teas, tinctures, extracts, pills etc, traditional medicines have now been formulated as tablets, capsules, ointment, cream etc. along with age old ayurvedic formulations like fermentation products (Asava, Arishta), decoctions, medicated fats (Ghrita and Taila) etc.

Ayurvedic medicines are being sold in two ways, by practicing ayurvedic physicians and through retail counters. Again retail counters are of two types- i) purely ayurvedic and ii) along with allopathic medicines. Classical ayurvedic medicines as mentioned in original texts of ayurveda are usually available in former type of counters, whereas patent and proprietary herbal medicines are mainly available in allopathic chemist shops. Both types of chemists are available in almost all small and big towns or cities from where the required ayurvedic medicines can be accessed.

Several medicinal products (including ayurvedic and other traditional products) are available at the market containing natural products or more specifically plant products only as active ingredient. They constitute large proportion of Indian medicinal market and have substantial market potential, which are well known. In India, at present there are about 700,000 registered practitioners of Ayurveda, Siddha and Unani medicine and there are about 25,000 licensed retail pharmacies of Indian system of medicine. However till date, the retailing area of these products did not receive considerable attention. There is no appropriate guideline for retailing of these

medicinal products. There are certain specific regulations (Drugs & Cosmetics Act, WHO, GMP etc) regarding the manufacture and quality control of traditional herbal products but still now there is no rational strategy for retailing of these formulations just after production i.e. transport/shipping, storage in wholesale and retail until consumption. All of such medicines can be bought over the counter by anybody without any prescription and moreover, there is no trend for keeping records and post marketing studies of utilization/consumption of medicines in retail, after launching to market. There are no reliable information for proper packaging material, transport, storage conditions (including climatic influences) and sale of these products as compared with allopathic medicines.

Likewise allopathic medicines, herbal or ayurvedic medicines are proven therapeutic agents intended to be used for similar or often complicated indications and herbal medicines are also nothing but chemical agents which can be influenced by similar factors like temperature, humidity, atmospheric oxygen, light, packaging materials etc that can affect the quality, safety and efficacy of synthetic chemical molecules. Furthermore, being multiconstituent product, herbal products are much more prone to degradation/deterioration than modern allopathic products. Hence, proper retailing management strategy for these products is required to be developed and implemented to ensure the overall quality safety and efficacy of traditional herbal products, which will ultimately increase the reliability and compliance of herbal products within the consumers.

It is generally believed that traditional and herbal medicines are free from side effects as observed in most allopathic medicines. This is not true in fact. Though most of the traditional medicines are free from serious side effects, these are not absolutely free from adverse effects and toxicity and these may tend to aggravate due to the existing improper retailing systems. There is another problem with these products. Most of the herbal and ayurvedic products are liquids, semi solids or powders. It has been found that the susceptibility of deterioration during shipping and storage is much more in case of liquid and semi solid products as compared to solids. Hence it is necessary to optimize the stability profile of the traditional products during transportation and storage under certain climatic conditions, prior to final marketing. For allopathic products there are certain guidelines (ICH, WHO, cold chain management system, etc.) for short and long term stability profile assurance and monitoring, but for herbal products there is still now no specific and harmonized regulation in this regard. Attempts are on the way and speed up in the process is highly necessary for the benefit of mankind.

It is the fact that there are certain problems in standardization and detection of deterioration of mostly multicomponent herbal formulations. However newer techniques are being available like newer instrumental and chromatographic assay/detection techniques; chemical, biological, molecular and genomic marker techniques; physical-chemical, biochemical techniques etc by which it is not impossible at present to track the deterioration of traditional products. However, most of these techniques are expensive and need proper expertise to carry out in practice. This is hindering to set the quality control parameters for finished polyherbal formulations and the stability parameters as well and thereby preventing to find out the possible retail management strategy.

In the past or even in the recent days there has been no regulatory control over the retailing of traditional medicines. In manufacturing, controlling authority is taking care of slowly. Even now, in some cases the traditional practitioners prepare and sell their own medicines and claim that the medicines prepared and sold by them have got proper medicinal constituents and hence quality and efficacy. This often satisfies the consumer but the fact is that unfortunately the practitioners often do not aware about the proper chemical composition and hence their stability and storage issues. For example, precipitation or sedimentation/deposit in liquid products is often regarded as accumulation of active principles and advised to 'shake well before use'. In fact, this may be due to decomposition of the product which may be harmful.

It is therefore necessary to control and harmonize the manufacturing and quality control of traditional and herbal products, otherwise control in retailing sector can not be achieved. In India, traditional medicines are governed by the Drugs and Cosmetics Act 1940 and Rules 1945. They regulate the import, manufacture, distribution and sale of drugs and cosmetics. In 1959, The Govt. of India recognized the traditional Indian systems of medicine and amended the Drugs & Cosmetics Act to include drugs, which are derived from traditional Indian medicine. The Government of India has set up pharmacopoeial committees and published pharmacopoeias for indigenous systems of medicines. The Government of India has also published the Ayurvedic Formulary of India to establish the formulation and storage parameters of various ayurvedic preparations. Unfortunately there is little urge mainly by the small-scale herbal product

manufacturers to abide by these pharmacopoeial or other regulatory standards and there is no strong control by regulatory authorities to assess them. In retail area there is practically no control. Requisite quality and safety standards, which can be applied at retail area, need to be developed, validated and optimized by proper authority, personnel and infrastructure. Then only regulatory bodies can be able to exercise effective control over the retail sector of these medicines.

People have been consuming traditional and herbal products by paying similar or often more price than allopathic medicine and their consumption is increasing day by day as people are considering them better options for their health care needs. However their retailing system has often been faulty and has still been ignored. India is a land where the oldest and largest traditional systems of medicines (Ayurveda, Siddha, Unani, etc.) are still being well practised in these days also. Organized herbal drug industry is also well growing simultaneously. It is our responsibility to frame appropriate stability and storage standards according to the nature and indication of the products, shipping and climatic conditions for not only to control the products in retail but also to improve the export potential. It is well known that ayurvedic and similar herbal products have very good export potentiality. However, in absence of proper strategy these traditional products, though manufactured properly as per regulatory guidelines, may be of poor quality, inefficacious and unsafe at the time of procurement from retail counter and use. This will be a great futility when consumers would be regarding the herbal products with skepticism, perhaps due to this fact. The ultimate sufferer may be the herbal or ayurvedic drug industries.

With the increased and renewed interest in traditional and herbal medicines and their formulations, it is also equally necessary to look into all aspects of the retailing sector of these medicines. It is definitely not an easy task. It will obviously require more time, worth, man power and awareness to achieve proper regulation and harmonization in this regard to ensure the quality, safety and efficacy of the products until end-use. This will actually make our traditional indigenous medicine more reliable, rational and acceptable to the people. Hope for the best in the future.