

A Review of Traditional plants

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Abstract

The concept of ethnopharmacology was first defined in 60's which describes an approach to the discovery of single biologically active molecules that has been used ever since the first compounds were isolated from plant material. It should also be noted that the discovery of new drugs might derive from a wider use of plants than for strictly medical purposes alone. Thus, materials used as poisons, in pest control, in agriculture, as cosmetics, in fermentation processes and for religious purposes might also yield active substances that can be exploited as leads for drug development. However, article simply describes traditional plants of Bangladesh and their use because of the greater interest of general people, surprisingly, around 80% of the population of developing countries (according to WHO) now partially or fully dependent upon herbal drugs for primary healthcare. It should be remembered that Since the ingredients used are herbal, not only the ingredients often have added benefits that overall improve your health but there are chances of side effects.

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Introduction

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Traditional medicines: Contribution to modern medicine

Ayurveda: With the term "Ayurveda" (AYUR means life, VEDA means Knowledge) translating to the 'science of life,' this traditional medical system is based on the belief that the human mind and body are deeply interconnected [1,2]. It reveals disease has been considered for fold (Body, mind, external factors and natural intrinsic causes). Being one of the oldest medical systems in the world, Ayurveda has its roots from the Vedic culture of India. The motto is simple- if you want to be healthy, your mind and bodily systems must be in balance and at harmony with each other [3,4]. Ayurvedic doctors prescribe a combination of medicines that often include essential oils, diet supplements and breathing exercises based on your DOSHA's. They are ultimate irreducible basic metabolic elements of living beings, determines the process of growth and decay. The TRIDOSHIC system was the fundamental concept of Ayurveda. They are classified into VATA (Air, causes emaciation, tremors, distention, constipation etc.), PITTA (Bile, which governs digestion, hunger, courage etc.) and Kapha (Phlegm, that holds together, gives lubrication, stability, causes nausea, cough and lethargy when becomes excess) [5]. The 'Samhitas,' or encyclopedia of medicine, were written during the post Vedic era, and include 'Charka Samhita' (900 BC), 'Sushruta Samhita' (600 BC) and 'Ashtanga Hridaya' (1000 CE). Utilization of plants was mentioned in Rigveda and Ayurveda (Veda, 3 types, there was also a Juju Veda). Charka Samhita was the first recorded treatise on Ayurveda (8 sections divided into 150 chapters, describing 341 medicinal plants. Another treatise of Ayurveda was Shushruta Samhita with special emphasis on surgery, although

describing 395 medicinal plants, 57 drugs from animal origin and 64 minerals and metals as drugs [6,7].

Unani: Contribution of Unani medical system to modern pharmacy is beyond description. In between 7th to 8th centuries, Arabs conquered a greater part of ancient civilized world, extending empire from Spain to India. During the reign of Caliph Harun-Al-Rashid (786-814 A.D), some Indian physicians were invited to Baghdad. Manaka, one of those physicians translated some book of Sanskrit to Arabic. Juhanna Ibn Masawaih translated Greek manuscripts to Arabic and wrote a medical book, 1st London Pharmacopoeia was largely based on his formulae. The Arabs greatly improved pharmaceutical products and made them more elegant and palatable. Their pharmacy and Materia Medica were followed for a long time. Arab pharmacists mixed rose water and perfumes with medicines. They invented tinctures, confections, syrups, pomade, plasters and ointments [7,8].

Homeopathy: According to Homeopathy system until the potency governing the on the body of a human being is powerful and controls the functions of all organs. A disease produced in the body and brain will affect the other body organs, truly reveals modern day doctors saying, if your heart is weak, it will affect your kidneys someday. Or the ultimate untreated rheumatoid arthritis affects heart in a long run. However, there are three essential processes involved in preparation of remedies; serial dilution, succession and trituration (methods by which mechanical energy is delivered to our preparations in order to imprint the pharmacological message of the original drug upon the molecules of the diluent). Homeopathy's roots emerge from the findings, teachings and writings of Dr. Samuel Hahnemann (1755-1843). It was when Hahnemann began working on a project to translate William Cullen's Materia Medica into German that he began his quest for a better way of providing healthcare using the principles of "Similars." While working on this project, he became fascinated with a species of South American tree-bark (cinchona) which was being used to treat malaria-induced fever. Hahnemann ingested the bark and discovered that it caused symptoms similar to malaria. He continued his research into "cures" and the idea of "similar suffering," and began compiling his findings. Similia similibus curentur, the Latin phrase meaning "let likes be cured by likes," is the primary principle of homeopathy [9]. Today, nearly all French pharmacies sell homeopathic remedies and medicines; and homeopathy has a particularly strong following in Russia, India, Switzerland, Mexico, Germany, Netherlands, Italy, England, and South America. Homeopathy is also rising again in the United States. This resurgence has been documented by the National Center for Homeopathy in Virginia, which stated that Americans spent

230 million dollars on homeopathic remedies in 1996. It has also been said that sales are rising rapidly at about 12 – 15% each year.

Siddha System of Medicine: An ancient system of medicine, uses minerals and metals, mainly but some products of vegetable and/or animal origin also used. The Siddha system is based on a combination of ancient medicinal practices and spiritual disciplines as well as alchemy and mysticism. Hence medicine of the human is produced from PONCHOBUTA (PONCHOBOTI DAWAKHANA concept, mostly called in Bangladesh) theory (Gold, Lead, Copper, Iron and Zinc), where Gold and lead imparts maintenance of the body; Iron and Zinc generates electricity, employed in medicines that are administered for life extension. Copper used for heat preservation and other metals for body detoxification. Traditionally, it is taught that the siddhas laid the foundation for this system of medication. Siddhas were spiritual adepts who possessed the ASHTA siddhis, or the eight supernatural powers. Siddha medicine has been used for the management of chronic diseases and degenerative conditions, such as rheumatoid arthritis, autoimmune conditions, collagen disorders, and conditions of the central nervous system. Its effectiveness in those situations has varied [7,10].

Traditional plants in treating major/minor ailments

Through the centuries, sick people have been helped over and over again by remedies that did not arise out of the formal doctrines and procedures of the medical profession. The use of plants (Tables 2-5) to treat sickness is probably as old as mankind; formal medicine and medical degrees are, of course, much more recent. Yet if medicine is broadly defined as the attempt to treat and cure human illness, then the human beings who first grew and collected plants they thought useful, herbalists, and the first people to try to heal by the use of herbs, also called herbalists or herb doctors, must surely rank as pioneers of modern medicine [13].

Many Western medicines are based on traditional knowledge from Europe and the Mediterranean region. This is why interest is rapidly increasing in Indian and Chinese medicine, both of which represent a very long tradition of apparently safe use. However, these healthcare systems are different from Western medicine, so novel methods are required to verify the efficacy and safety of the therapies [15].

In the case of China, Western medicine was introduced in the sixteenth century, but it did not undergo any development until the nineteenth century. Before that, traditional medicine was the

dominant form of medical care and still now plays an important role in China, and it is constantly being developed.

In the early development of modern medicine, biologically active compounds from higher plants have played a vital role in providing medicines to combat pain and diseases. For example, in the British Pharmacopoeia of 1932, over 70% of organic monographs were on plant-derived products. However, with the advent of synthetic medicinal and subsequently of antibiotics, the role of plant derived therapeutic agents significantly declined in the economically developed nations [17]. Even in developed countries a variety of natural products enjoy their well-deserved recognition in the therapeutic arsenal. However, their actual and precise method of production is more or less an extremely individualized aspect.

Commonly practiced home remedies with traditional medicines

Bangladesh and a significant part of South Asia possess a vibrant and thriving medical pluralism. Traditional medicine continues to be a valuable source of remedies (Table 6) that have been used by millions of people around the world to secure their health. The various diseases treated included gastrointestinal disorders, jaundice, leucorrhea, tooth and gum disorders, helminthiasis, allergy, respiratory tract disorders, skin diseases, anemia, pain, and diabetes [19].

Alternative medicine dispensing by the folk medicine practitioners

Medical pluralism has led to an intrinsic feature of its medical system in historical and contemporary contexts. Folk medicines are widely practiced for primary healthcare, underlying factors such as economy, education, religion, culture, and environment. The KAVIRAJI treatment is also known as BONOJO CHIKTSYA (treatment by wild forest herbs) or VESHOJO CHIKITSYA (herbal treatment). They primarily use different Barks, Roots, Rhizomes, Leaves, Flowers, Fruits, Seeds, Herbs or other common items available in and around their homestead, collected from remote hills/forests or grown through cultivation. In some cases, they also perform rituals based on faiths, and recite holy verses (mantras). Three factors which legitimize the role of the folk healers include: their own beliefs, the beliefs of the community and the success of their actions. Nearly 40% of rural community members have superstitions/misbeliefs or strong beliefs on herb and approximately 15% treats simple ailments with herbs. They mostly use different plant extracts for different diseases. Some of the kavirajes also use snakes' blood, birds or other animal parts, fish or fish oil and others chemicals as ingredients of their medicines. Dilution, dose,

administration time and mixture played a significant role in need of combinations of useful extracts by the traditional practitioners [25].

Conclusion

Safety is when any drug is ingested following an expert. Indiscriminate use of plant medicine may rise to severe long-term poisoning and short-term adverse events. Traditional plants have vast opportunities to explore, conducting extensive research necessary for their rational use in Bangladesh and abroad. Companies with big reserve can invest further to bring qualified researchers from abroad to see their further scope of extension for both business purpose and mankind. These dynamic fields are at the intersection of phytochemistry and plant biology and are concerned with the evolution mechanisms and systematics of medicinal plant genomes, origin and evolution of the plant genotype and metabolic phenotype, interaction between medicinal plant genomes and their environment, the correlation between genomic diversity and metabolite diversity, and so on. Use of the emerging high-end genomic technologies can be expanded from crop plants to traditional medicinal plants, in order to expedite medicinal plant breeding and transform them into living factories of medicinal compounds. The utility of molecular phylogeny and phylogenomics in predicting chemodiversity and bioprospecting is also highlighted within the context of natural-product-based drug discovery and development.

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