The Lost Glory of Folk medicine

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Abstract

Folk medicine is significant source of Ayurvedic, Unani, Traditional Chinese Medicine (TCM) and Medical herbalism. Folk medicine incorporates crude medicinal herbs, decoctions and infusions and syrups. Folk medicine is still practiced by some vendors, hakims and vaids in remote areas and some folk preparations are of surprisingly high curative value. A large proportion of the population in a number of developing countries still relies on traditional practitioners, including traditional birth attendants, herbalists and bonesetters and on local medicinal plants to satisfy their primary health care needs. Vincristine and vinblastine, the potent anti cancer drugs were derived from folk plant, Vinca rosea (periwinkle) used traditionally for the treatment of diabetes mellitus. Today herbal medicine is making dramatic comeback and scientists are turning to natural products for answer to ailments like cancer, Aids, hepatitis and rheumatoid arthritis. The article reviews the history and possible role of folklore drugs in modern drug industry.

Keywords: Folk medicine/ Medicinal herbs/ Natural products).

Alternative systems of medicine have become increasingly popular in recent years. It is very difficult to define such systems because of their diverse origins and different beliefs. A broad, generalizable definition of such systems is widely accepted: "Systems of medicine not taught in the medical schools". They include a number of systems like homeopathy, acupuncture, traditional remedies, herbal medicine, etc. A study from the US demonstrated that about 34% of the general population used one or the other system at least once a year. Recently it was demonstrated that 76% of patients visiting the general medicine OPD of a tertiary care hospital use alternative therapies.

Traditional medicine has maintained its popularity in a number of Asian countries, such as China, India, Japan and Pakistan. In China, for example, traditional medicines (herbal preparations) account for 30% to 50% of the total medicinal consumption. In 1993, the total sales of herbal medicines amounted to more than US\$ 2.5 billion. In Japan, from 1974 to 1989, there was a 15-fold increase in Kampoh ("Chinese method") medicinal preparations in comparison with only 2.6-fold increase in the sales of mainstream pharmaceutical products. The Japanese per capita consumption of herbal medicine appears to be the highest in the world.

During the last decade, there has also been a growing interest in traditional and alternative systems of medicine in many developed countries. One-third of American adults have used alternative treatment and 60% of the public in the Netherlands and Belgium, and 74% in the United Kingdom are in favour of complementary medicine being available within the framework of the National Health Service. A survey among Member States of the European Union in 1991 identified about 1400 herbal drugs used in the European Economic Community.

A genuine interest in various traditional practices now exists among practitioners of modern medicine and growing numbers of practitioners of traditional, indigenous or alternative systems are beginning to accept and use some of the modern technology. This will help foster teamwork among all categories of health workers within the framework of primary health care. The reasons for the inclusion of traditional healers in primary health care are manifold: the healers know the sociocultural background of the people; they are highly respected and experienced in their work; economic

considerations; the distances to be covered in some countries; the strength of traditional beliefs; the shortage of health professionals, particularly in rural areas, to name just a few.

Medicinal plants are the oldest known health-care products. Their importance is still growing although it varies depending on the ethnological, medical and historical background of each country. Medicinal plants are also important for pharmacological research and drug development, not only when plant constituents are used directly as therapeutic agents, but also when they are used as basic materials for the synthesis of drugs or as models for pharmacologically active compounds.

The history of the relationship between products from living plants and healing medications goes back to the very beginnings of medicine itself, from 3700 B.C. Egypt, followed by the Chinese and later the Greeks and Romans. Evidence from some of the earliest sources--the Atharvaveda from India (written in about 1200 BC), the Petrie collection from Kahun in Egypt (from about 1880 BC), and the Avesta from Persia (compiled in about the 6th century AD)--shows that early medicine was based mainly on religion and magic but also included a growing use of herbs and mineral products.

Folk healers are unlicensed but not necessarily untrained. Like physicians, they pursue their specialties, learning by observation and imitation. Often healing is considered a gift that runs in a family and is passed down from mother to daughter or from father to son. The ability to set bones, for example, is thought to be hereditary as is the power to stop bleeding. Charms are often recited by the healer and jealously guarded.

Faith healers make use of prayer and touch to treat disease. Most other healers use some combination of prayer, charms, and rubbing or massage; or they prescribe herbal teas or decoctions of animal parts and vegetables. There are also magical rituals, or procedures, such as pulling a person through the cleft of a tree or a bramble bush to be divested of disease. Then there is putting a bag containing a mixture of worms and human hair under a threshold to cause disease. The person who steps over the hidden bag will get ill because folk healers can cause disease as well as cure it.

Herbal medicines were used with magical practices, sometimes alone. Many of the herbs used by the American Indians--such as datura, coca, cinchona, curare, cascara sagrada, and the like--are now used as drugs in modern scientific medicine. Herbal medicines are assuming greater importance in the primary health care of individuals and communities in many developing countries and there has been an increase in international trade in herbal medicines. However, in most countries the herbal medicines market is not adequately regulated, and the products are therefore unregistered and often not controlled by regulatory bodies.

Chinese medicine has also continued many traditional practices. Most of the knowledge of early Chinese medicine has been gleaned from the Yellow Emperor's Nei Ching (Classic of Internal Medicine), which formerly was thought to date from before the year 2000 BC but is now believed to be from the 2nd century BC. Artemisinin, a potent Antimalarial drug was derived from Artemisia annua, a plant traditionally used in China for the treatment of malaria. A decoction of dried herb is taken for curing this aliment.

Indian medical systems, among them the ancient science of Ayurveda, have always been aware of the medicinal value of plants. To cite but one example, for at least 2500 years before the West recognized the medicinal properties of the Rauwolfia serpentina (sarpagandha) root, used by folk healers to calm violently disturbed patients. In the 1940's Indian scientists isolated the active substances from rauwolfia and discovered its added benefit as a remedy for high blood pressure.

The Madagascar periwinkle with its pink/white flowers is a hardy perennial that grows without fuss in countless Indian gardens. So persistent is the flowering that the shrub has come to be known as sadabahar, meaning `ever bloom'. In the 1950's, the periwinkle yielded some alkaloids, particularly useful in the treatment of leukaemia. Great piles of crushed

periwinkle leaves are now exported from India to the U.S. to be ground and processed into anti cancer drugs. It takes 12 tons of leaves to extract one ounce of the active ingredient, hence the bulk. Traditionally, the folk healers used this drug fir the treatment of diabetes mellitus.

In 1500 B. C. Hippocrates, a Greek physician, prescribed leaves and bark from willow tree to relieve fever and pain. In 200 B.C, native people of North America learn to make salicylate pain remedies from birch bark. Researchers in the last century identified and isolated Salicin, a glycoside as active principle. From Salicin, Salicylic acid and finally Acetylsalicylic acid were synthesized.

Folk medicine describes a drug Ati-bala [confirmed to be Sida rhombodifolia] to be most powerful immnunomodulator and modern investigations prove that the drug, stimulates phagocytosis, acts as anticomplementary agent, immune stimulant and hypoglycemic. According to the latest development the drug has been found to be effective in enhancing immunity in AIDS patients.

Plaunotol isolated from Croton sublyratus is a potent ulcer-healing agent. A number of plant derivatives have shown anti-Aids activity. Ancistrocladus korupensis (michellamine-b), Caulophyllum langigerum (calanolide), Caulophyllum teymani (costatolide), Homalanthus nutans (prostratin), Conospermum species (concurvone) are the medicinal herbs from African countries find application in research for exploring a suitable cure for Aids. All these drugs are derived from African folklore.

Bacopa monniera is a medicinal herb used in ancient system of medicine, Ayurveda. Recent clinical research has highlighted the role of the herb as 'brain tonic'. Bacopa monniera is mentioned in old texts as Medhyarasayana [in allusion to brain tonic]. Initially there was confusion regarding the identity of the drug. The drug is widely prescribed by folk healers in loss of memory. Saponins known as bacosides are the active principles of the herb.

With onset of scientific research in herbals, it is becoming clearer that the medicinal herbs have a potential in today's synthetic era, as numbers of medicines are becoming resistant. According to one estimate only 20% of the plant flora has been studied and 60% of synthetic medicines owe their origin to plants. Ancient knowledge coupled with scientific principles can come to the forefront and provide us with powerful remedies to eradicate the dreadful diseases.

In Germany regulatory authority's herbal watchdog agency, commonly called "Commission E" has recently conducted an intensive assessment of the pre-reviewed literature on 300 common medicinal herbs, weighing the quality of the clinical evidence and identifying the uses for which the herb can reasonably be considered effective. American Herbal Pharmacopoeia, American Botanical Council, British Herbal Compendium are some reputed names who are seriously working on upliftment of folk medicine.

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