THE HISTORICAL IMPORTANCE OF ETHNOMEDICINE

THE USE OF MEDICINAL PLANTS AMONG THE NOMAD PEOPLES OF CENTRAL-EASTERN AFRICA

Part Two

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If it is clear that these peoples have always dealt with the said drugs in the same way, it is also true that the western medicine, owing to its contacts with the Arabian culture during the centuries, became acquainted and started utilizing drugs of crucial importance for the *materia medica*.

The different species of the plant called *Boswellia hildebrandtii (Engl.), for example,* which drew its name from the English botanist ROXBURG in the second half of XVIII century, have been well-known since ancient times as they supply the famous *incense*. Most incense found in Europe came from the upper Nile area, where the *Boswellia* species are well-known both for their anti-catharral properties and for their medical and religious significance. In fact, the gum or the bark of these trees are burned to give off fumigations against bronchitis and are also utilized during circumcision ceremonies in order to obtain scented and propitiatory smoke. We now know that the incense, previously used during pagan rites, was gradually adopted by the Christian liturgy. Moreover, the incense was one of the ingredients of old and famous preparations whose inhalations carried out a disinfectant action against bronchial catarrh, such as the *Fioravanti Balsam*.

There was another substance imported from the western Arabian coasts and from the slopes of Central and Northern Africa: it was a scented and bitter resin extracted from the different species of *Commiphora,* the *myrrh*. Thanks to its phenolic resins, this drug has astringent and anti-inflammatory properties and was thus widely used in the western world for oral hygiene and against any kind of skin or mucosa inflammations.

Also the dried and concentrated *Aloe* juice came to Europe through the Red Sea and Alexandria and its trade name was *Aloe Socotrina*; an extremely bitter liquid very well known by any medical doctor and apothecary. There are more than 200 species of *Aloe* growing in Africa and, with the high and brightly coloured plumes of their inflorescences, represent a typical feature of the African landscape.

The pharmaco-chemical researches carried out on the ingredients of *Aloe* fresh juice explain its popular utilization. Such juice, in fact, mainly consists of a hydrocolloid gel composed for the most part of such sugars as *glucose, mannose, galactose,* and *arabinose*, for a small part of a group of *sterols* and a *saponin*, and of many *mineral salts*.

Also the long-living *Dracaena* comes from Africa where it was worshipped by the native people as "dragon tree".

Finally we should mention the acacia, a typical plant of the rocky plateaux of Eastern Africa. Local people use it to build their sheds, to fence their villages, to keep wild animals off, to make rudimentary tools and to draw medicinal remedies. Even though acacias have never grown in Europe, they were known by the Greeks and the Romans; the name itself (*achachìa* or *kakìa)* is of Greek origin and is referred to by Theophrastus.

Later on, the Romans related such term to the word "*acuo*"- maybe connected with the sharpness of its spines - from which the name *"Acacia"* derives.

Pliny himself mentions this plant and its gum; acacias are in fact the trees from which the gum arabic is obtained; and, to quote Mattioli, it is *"...that excellent gum as transparent as glass, similar to the pine resin, that has the property of filling and sealing the skin pores and of making the medicines less bitter..."*. Nowadays the gum arabic, among other uses, is still utilized as an irreplaceable excipient. Among the numerous species of acacias growing in the Nile-Hamitic regions, three of them are regularly used as medicaments: *Acacia Nilotica, Acacia Nubica* and *Acacia Senegal.*

In recent years many pharmaco-chemical researches have been carried out on the active principles of *acacias*. Such researches contributed to reach remarkable results in the therapy of a parasitic disease affecting the whole Africa: *schistosomiasis*.

In conclusion, it is clear that the Third World is a mine of active principles drawn from plants: therefore an effective extractive method together with an adequate commercial production might represent a realistic opportunity for development.

If properly organized, the study of the traditional medicine of these peoples might lay the foundations of a pharmaceutical industry based on the local resources whose production could be used together with the western remedies, according to the chinese example. As a result, the Third World would not be any longer the rubbnish dump for our medicaments. We should also consider that the drug extractive process and the researches on their biological properties are not so prohibitive, or at least not so sophisticated and complex as a synthesis plant is; therefore any University (even one of the Third World) with a good team of technicians could reach meaningful aims. If so, it would represent a great opportunity for the Third World to discover new remedies and to exploit their own natural resources.