

Importance of Natural Plants in Human Health

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ABSTRACT

Traditional medicine still remains the main recourse of the majority of populations in developing countries. This medicine uses substances of animal, mineral and especially vegetable origin. Medicinal plants have always been part of the daily life of man since he uses them to feed himself, to cure himself and sometimes in his religious rites. Different traditional plants are used in the treatment of cardiovascular diseases such as hypercholesterolemia, atherosclerosis, hypertension and their associated factors (diabetes, obesity, etc.). The roots and leaves of these plants are used in herbal tea in the treatment of these diseases. Traditional medicine, which is based on traditional knowledge, deserves to be promoted. This valorization requires the availability of improved traditional medicines, that is to say effective, with proven safety and with precise posology. This study is made on the effect of some medicinal plants on some cardiovascular diseases, liver diseases, and cholesterol in the blood as well as the blood pressure. On the other hand a kind of general description on some cardiovascular diseases; hypercholesterolemia and arterial hypertension, as well as the risk factors like obesity, we quote some medicinal plants indicated against these diseases.

Key words: Plants, Traditional medicine, Pathologies, Treatment, Roots.

Introduction

Man and plants have long cohabited together, making man accustomed to consume different species of plants that he appreciated both for their gustatory,

nutritive and medicinal qualities, which makes the human body better adapted to a plant-based treatment than to chemical treatments (Iserin, 2001). Thus on each continent have developed different traditions and different rituals using plants and

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which have been transmitted and enriched over time (Website 1 in Merad and Mahiout, 2019).

According to the World Health Organization, 2000: Traditional medicine is the sum total of knowledge, skills and practices that are based, rationally or not, on the theories, beliefs and experiences specific to a culture and that are used to keep human beings healthy and to prevent, diagnose, treat and cure physical and mental illnesses. In some countries, the terms alternative alternative medicine are synonymous with traditional medicine" (Xiaorui, 2000).

Nowadays, herbal medicines are widely used in traditional medicine to treat diseases (Davidson-Hunt, 2000). The public is increasingly interested in consuming medicinal plants because they are inexpensive and widely available. According to statistics from the World Health Organization, more than 80% of the world's population, especially in underdeveloped countries, provide their primary health care from herbal medicines (WHO, 2007 in Dolatkahi and *al.*, 2014).

The use of medicinal plants as a source of remedy to cure oneself or to prevent diseases originated from millennia to the recent Chinese, Indian and Near Eastern civilization. It has certainly become an art over the centuries, as herbal therapeutics has dissociated from magical practices to become empirical

Then scientific. This was evident at the beginning of the 19th century which marked the discovery of alkaloids (morphine, strychnine, quinine....) (Benkiki, 2006).

Approximately 35,000 species of plants are used worldwide for medicinal purposes, which constitutes the widest range of biodiversity used by human beings. Medicinal plants continue to serve an important need despite the increasing influence of the modern health system (Elqaj *et al.*, 2007 in Chaib, 2015).

In several developing countries, a large portion of the population relies on traditional doctors and their collections of medicinal plants to treat them (Benayad, 2008; Bitam, 2012; Bouguerra Ali, 2012).

Medicinal plants are all plants that would have a pharmacological activity that could lead to therapeutic uses, this thanks to the presence of a number of active substances, most of which act on the human body. Natural substances from plants have multiple interests in industry, in food, in cosmetology and in pharmacy. The pharmacy still uses a high proportion of drugs of plant origin and re-

search finds in plants new active molecules, or raw materials for semi-synthesis (Bahorun, 1997); Also they are in veterinary, cosmetology, as well as in the preparation of beverages, either natural, or in galenic preparation, or in the form of active ingredient, as a material for obtaining drugs (Naghbi *et al.*, 2005; Babulka, 2007 in Mebarki, 2010). The total number of plants used by the pharmaceutical, cosmetic and food industry remains very difficult to estimate (WHO, 1998).

Medicinal plants can also have food, condiment or hygienic uses. In other words, we can say that a medicinal plant is a plant of which one of the organs, for example the leaf or the bark, possesses curative virtues when used in a certain dosage and in a precise way. In the middle Ages, people spoke of "simples" (Debuigne, 1974). In the Code de la Santé Publique, there is no legal definition of a medicinal plant in the legal sense (Moreau, 2003). It is a plant, not mentioned as medicinal, which is sold over the counter by pharmacists (Chabrier, 2010)

The herbal medicine is a "complex" of molecules, derived from one or more plant species. Many galenic forms are proposed today, some more innovative than others, leaving the original infusion more or less obsolete. However, these changes in form can sometimes hide modifications in the action on the metabolism or bioavailability of active ingredients (Wichtl and Anton, 2003; Chabrier, 2010).

According to the estimates of the World Health Organization (WHO, 2011), more than 80% of the world's population, especially in developing countries, rely on traditional treatments (to meet their health and primary care needs (Farnsworth *et al.*, 1985; Hamza, 2011). For a long time, plants were used only in nature, in the form of herbal teas or powders (Bézanger-Beauquesne *et al.*, 1986). But currently their uses are very vast and varied.

However, this work is devoted to medicinal plants, galenic forms and their advice for use in the pharmacy in Phytotherapy whose interest and health and healing of man.

Discussion

Our work is based on some medicinal plants that give an important and major effect on the health of the human being.

These plants are the following:

Achillea mille folium L

Popular name: Chaiyata

It is a herbaceous plant belongs



Fig. 1. *Achillea millefolium* L

To the family of composites; it brings other name; grass to the carpenters, thousand Leaves, with erect stem, narrow, elongated, soft leaves, bitter taste, aromatic smell.

Silybum marianum Gaertn

Popular name: Chouk El Djamel, Bou Zeroual, doujn'ildirman



Fig. 2. *Silybum marianum* Gaertn

Belongs to the family of Asteraceae, it brings other name like white thorn, wild artichoke, it is a biennial plant, robust, thorny, with drawn up stem of 0,3 to 1,5 m, family large multilobed, with acute lobes, toothed, bordered of thorn and cilia, limb green-light, traced of milky white line marking the veins; embarrassing cauline leaves, inflorescences in hemispherical capitula, purplish purple, solitary,



Fig. 3. *Alchemilla mollis*

surrounded by numerous bracts in long reflexed point, achenes black more or less spotted with yellow, surmounted by a aigrette, thick root, swivelling, flavour of Artichoke.

Alchemilla alchemilla mollis

Popular name:

Camalya.

Hardy perennial belongs to the family Rosaceae, is also called coat

Of our Lady. This plant bears tender, blue-green leaves in the form of a cloak, with pleated edges that collect the dew drops, in summer loose clusters of greenish yellow flowers (Bremness, 1999).



Fig. 4. *Rhus coriaria* L

Rhus coriaria L

Popular name:

Soumaq: it is a Shrub of 1 to 3 m, belongs to the family of Anacardiaceae, it has other names like sumac of the tanners, vinegar, hairy in the upper part, with loose branching, the plant contains a toxic milky juice; strong smell.

Parts used:

Bark and dried fruit.

Active ingredient:

Tannin, pigments, glucosides, flavonoids (Said and al., 2002).

Achillea millefolium L.

Since the genus *Achillea* is widespread throughout the world, its species have been used by local people as folk or traditional herbal remedies. Bumadaran is a popular name for several species of *Achillea* in Persian language. They are reported as tonic, anti-inflammatory, antispasmodic, diaphoretic, diuretic, and emmenagogic agents and have been used for the treatment of hemorrhage, pneumonia, rheumatic pain, and wound healing in traditional Persian lit-

erature (Zargari, 1996; Saeidnia and Gohari, 2005). In Spanish-speaking New Mexico and southern Colorado, *A. millefolium* L. is called plumajillo, or "little feather," because of the shape of its leaves. Native Americans and early settlers used yarrow for its astringent qualities that made it effective for wound healing and anti-hemorrhage (Dodson and Dunmire, 2007). This plant is used to lower blood pressure and diabetes. It is used in infusion; Infuse a handful of thousand leaves during 10mn, drink a cup every day (Valner, 1980).

Silybum marianum gaertn

It is a hepato-protective plant; it promotes the flow of the gallbladder, it is indicated in the case of hepatic insufficiency. Seed: (effect comparable to those of the ergot of rye); cardiac tonic, hypertensive Leaf: Portal hypertension and its consequences (hemorrhoids, varicose veins, nausea,...) and for the hepatic insufficiency, as well as the seeds are indicated by the cardiovascular failure due to a disturbance of the vagosympathetic equilibrium and it is a hypotensive (Perotti, 1996).

Alchemilla mollis

The tannin produces an astringent and bacteriocidal effect, as well as the flavonoids to a regulating effect of the blood circulation (Vasoprotector), increases the resistance of the capillaries. Is used in infusion: We take a handful infuse for 10 mn, drink before each meal.

Rhus coriaria L

This plant is indicated against the diseases of the liver, as well as other diseases like the atherosclerosis. It is used in; tincture bark: let macerate 10 days 30 grs of bark in 100 grs of alcohol to 70 °, take 20 to 30 drops, two or three times a day.

Conclusion

The use of medicinal plants has experienced an important boom in recent times. Several factors can explain this craze for example: the decrease in purchasing power, the high cost of conventional drugs, the mistrust of synthetic products, the desire to consume organic "natural". These different factors justify the use of traditional and/or alternative medicine for populations in developed and developing countries. However, in developing countries, the use of traditional medicine is an element of cultural

heritage. According to WHO, nearly 80% of developing countries in the African region use traditional medicine (Koumare, 1996).

Today, we are witnessing a return to nature, to therapeutics by plants, after the excesses of misguidance of recent chemical and biological discoveries and which has proven a very important effectiveness on the health of the man.

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