Common medicinal folk recipes of District Buner, NWFP, Pakistan

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Abstract

An ethnobotanical project was carried out in the remote mountainous region of District Buner. Locals rely on medicinal plants for curing different ailments since time immemorial. However, recent and ever increasing dependency of locals on allopathic drugs along with industrialization, urbanization and globalization trends slowly but surely are modifying indigenous values and culture. The existing ethnobotanical knowledge of the area will not remain intact for long. In present study an effort was made to document common folk recipes of the area. Thus folk recipes used for curing 30 common diseases in the area were documented.

Key words:

Folk Recipes, Ethno medicine, Buner.

Introduction

Buner is located in the north of NWFP, bordering upper Swat on the north, Malakand Agency on the west, Mardan District on the south and Hazara Division on the east. Buner is a Sanskrit word which means forest, which seems to be true because Buner is rich in forestry.

Buner with an area of 1760 square kilometers lies between 34°-9' and 34°-43' N latitudes and 72°-10' and 72°-47' E longitudes. The climate of Buner district is moderate. During summer season, the climate is hot in the lower Buner (Ambele) but pleasant in the upper parts (Gadezai and Gokand). The summer season is short and mild. During this season the temperature seldom rises above 40° C. The winter season is very cool and extends from November to February. Rains and snow occur during this season. People migrate from upper parts due to severe cold and remain in the lower part of the district till the melting of snow.

On the basis of physical features, the area is divided into three independent villages. These are:

Barandu Valley
This is the largest valley and cover on area of 243 sq. kms. The average elevation of the valley is 670 meters and has a river called Barandu river.

Chamla Valley
This valley his towards the south of Barandu Valley and lovers an area of 49 sq. kms. This valley has almost similar elevation to that of Barandu valley i.e. 670 m. The valley is drained by Chamla river which join Barandu river. Both of these finally feed the Indus river.

Badri Valley
Southern part of Buner district comprises Badri valley. It covers an area of 77 sq. kms. The valley is drained by Badri river which finally reach the river Kabul.

Historical background of the area

The area has a great history and cultural heritage. The area was invaded by Alexander during the year 323 B.C. (Khan, 1996). This region is conquered by Chandra Gupta of Mouryan dynasty during 306 or 305 B.C. During King Ashoka region (262 B.C), Buddhism flourished in the area. Hundreds of monasteries and stupas were built in the area, the remnants of which are still seen in Buner (Hassan, 1980).

Mahmud of Ghazna, invaded the area during 11th century A.D. and conquered it by defeating the Buddhist ruler, Raja Geera. The area was then conquered by Moghul emperor Baber, and came under the rule of Akhund Sahib of Swat during 1840,s. In 1863 A.D, the British armies invaded Buner and a fierce battle was fought on 20th November, 1863(Captain et al., 1981). The area was merged with Pakistan by president General Yahya Khan on 28th July, 1969 A.D.

Aims of present Study

The plants are in human use since the beginning oh human civilization. The people used the indigenous flora for negotiating their multidimensional requirements. Plants were also used extensively for treatments of different ailments. However, the introduction of allopathic drugs decreased human dependency on medicinal plants. In the present world, where Industrialization accompanied with urbanization has greatly modified the values and life standards of the bulk of population, the folk knowledge of people pertinent to medicinal plants uses are in danger of being lost for ever. It was thus considered worthwhile to document the folk uses of medicinal plants for curing important human diseases.

Buner is a remote district of NWFP. Allopathic Practitioners as well as pharmaceutical shops are scarce. In addition, the cost of these medicines is beyond the reach of dwelling population. The properties and nature of the raw drugs of plant origin are known to villagers through personal experience and ancestral prescription. These drugs are being used regularly from generation to generation and have proved to be effective and beneficial. There is an added advantage that herb usually have less side effects as compared to the allopathic drugs. At times certain medicinal plants are available free of cost as they grow in the surrounding areas.

Materials and methods

Buner was visited several times for collection of data during the year 2002. Local people aged above 50 were interviewed for folk recipes used in the area. Questionnaires were adopted for this purpose. The data obtained was analyzed carefully.

Results

During the present study folk recipes for 30 common human diseases in the area were documented. These diseases along with their recipes are given below.

Abdominal Pain
Plant: *Mallotus phillippensis* Muell.
Part Used: Bark
Recipe: The bark is removed and chewed in mouth. Watery juice produced in mouth is swallowed. It gives relief in abdominal pain.

Plant: *Indigofera gerardiana* L.
Part Used: Root bark
Recipe: The root bark is chewed in mouth to relieve abdominal pain.

Plant: *Mentha sylvestris* (L.)Huds.
Part Used: Flowering shoots.
Recipe: The leaves of flowering tops are crushed. The powder is mixed with table salt and then used for abdominal pain.

Agalactia
Plant: *Riccinus communis* L.
Part Used: Leaves
Recipe: The leaves of Riccinus communis is warned over fire and applied to the breast of women, to act as a glactagogue (increase the milk secretion)

Anemia
Plant: *Melia azadirach* L
Part Used: Leaves
Recipe: The leaves decoction is used to increase hemoglobin content.

Asthma
Plant: *Achyranthus aspera* L.
Part Used: Dried ripe fruits
Recipe: The ripened fruits are roasted and grinded and are used by the patient of asthma as an expectorant.

Body warmness
Plant: *Bergenia ciliata* (Haw.) Stermb.
Part Used: Rhizome
Recipe: The rhizome of Bergenia ciliata is crushed and then exposed to night dew in a vessel. Then water is added to the crushed materials, filtered and the extract is used for body warmness.

Body weakness
Plant: *Acacia modesta* Wall.
Part Used: Gum
Recipe: The gum obtained from the bark is mixed with Desi ghee, almond and wheat flour and fed to the women after childbirth as a tonic to relieve her body weakness.

Cold and cough
Plant: *Punica granatum* L.
Part Used: Fruit epicarp
Recipe: Fruit epicarp locally called (Nursavay) after drying is grinded and a powder drug is obtained. For cough and sore throat one tea spoon along with honey is recommended at night time.

Diabetes
Plant: *Zizyphus jujuba* Mill
Part Used: Leaves
Recipe: The leaves of the plant are plucked and chewed by diabetic patient to decrease sugar level.

Dandruff
Plant: *Convolvulus arvensis* L.
Part Used: Roots
Recipe: The old women used roots of Convolvulus arvensis for washing hair to remove dandruff.

Diarrhea/Dysentery
Plantsource: Mixture of leaves of *Berberis lycium* Royle, Plant of *Oxalis corniculata* L., Flowers of *Viola serpens* Wall. and Seeds of *Plantago lanceolata* L.
Recipe: All the above components are crushed, mixed with water and then filtered through a cloth. The extract obtained is used to cure diarrhea. The dried seeds in Ghur syrup are one of the useful household remedies to cure diarrhea and dysentery.

Dribbling urination
Plant: *Quercus incana* Roxb.
Part Used: Fruits
Recipe: The fruits are half roasted, then grind into powder form and a little amount is taken with Desi ghee. It is used

in urinary infections, especially when urine oozes drop by drop.

Dyspepsia
Plant: *Acorus calamus* L.
Part Used: Rhizome
Recipe: The extract obtained from the crushing and squeezing of rhizome is used in dyspepsia.

Plant: *Chenopodium morale* L.
Pert Used: Fruits
The dried ripe fruits are crushed into powder form, which is taken with water for dyspepsia.

Plant: *Fumaria indica* (Haskn.) H.N.
Part Used: Young shoot
Recipe: The young shoots are dried in shade and then by grinding made into powder. This powder is then taken with cold water in dyspepsia.

Ecto Parasitism
Plant: *Melia azedarach* L
Part Used: Flowers
Recipe: A poultice of flowers of Melia azedarach is used to kill lice and to cure eruption of the scalp.

Emesis
Plant: *Fumaria indica* (Haskn.)H.N.
Part Used: Whole Plant
Recipe: The whole plant after drying in shade is made into powder by grinding. In order to prevent vomiting, the powder is taken with cold water.

Fungal infection
Plant: *Euphorbia prostrata* L.
Part Used: Milky latex
Recipe: The milky latex obtained from the plant is used for ringworm.

Plant: *Dodonea visocosa* (L) Jacq
Part Used: Stem and Leaves
Recipe: A cross section of the stem is taken and placed on fire. The juice comes out is supplied externally for the treatment of fungal infection.

Gingivitis
Plant: *Berberis lycium* Rolye
Part Used: Roots
Recipe: The roots of Berberis lycium along with that of Acacia modesta are boiled in water and the decoction is used for toothache and septic gums.

Jaundice
Plant: *Melia azedarach* L.
Part Used: Leaves
Recipe: The decoction obtained after crushing and squeezing the leaves is used in jaundice.

Plant Used: *Berberis lycium* Royle
Part Used: Bark
Recipe: The bark is boiled in water and then an extract is obtained which is used in jaundice. Normally one glass of extract is recommended early in the morning.

Plant: *Chenopodium murale* L.
Part Used: Leaves

Recipe: Leaves are crushed, mixed with water and kept for night dew in a pot. For the treatment of jaundice it is usually taken early in the morning.

Plant Source: Mixture of leaves of *Viola serpens* Royle, leaves and bark of *Pistacia integrima*, J.L.Stewart ex Brandis and *Rubus* spp.
Recipe: These entire component are crushed together, little water is added and then exposed to night dew in a vessel. Then filtered through a cloth and used early in the morning as a useful remedy for jaundice.

Plant: *Pistacia integrima* J.L. Stewart ex Brandis
Part Used: Bark
Recipe: The bark peeled off from trunk and branches are boiled in water to obtain an extract, which is used for the treatment of jaundice.

Impotency
Plant: *Foeniculum vulgare* Miler.
Part Used: Fruits
Recipe: A hot poultice of fruits of Foeniculum vulgare is used as an aphrodisiac.

Lactorrhoea/ Glactoria
Plant: *Juglans regia* L.
Part Used: Bark
Recipe: Decoction of the bark of Juglans regia is used to stop mammary secretions.

Malaria
Plant: *Verbena officinalis* L.
Part Used: Stem and Leaves
Recipe: The whole plant is crushed and juice is obtained by squeezing. Being highly bitter in taste, little sugar is added and used before meal. This can also be boiled in water and the decoction is used to cure malaria.

Menstrual Disorder
Plant: *Acorus calamus* L.
Part Used: Rhizome
Recipe: The powder drug obtained form rhizome is mixed with ghee and tablets are made. These tablets are used as tonic by women in irregular menstrual cycle.

Polyuria
Plant: *Asplenium* spp.
Part Used: Dried leaves
Recipe: The dried leaves are made into powder drug by grinding and mixed with water and used in urine suppression (uroschesis).

Psycho spiritual problems
Plants: *Skimmia laureola* (D.C.) Stph. and *Peganum harmala* L.
Part Used: Leaves and branches
Recipe: The smoke of leaves of Skimmia laureola and branches of Peganum harmala is locally believed to be useful remedy to repel evils.

Renal calculi
Plant: *Equisetum arvensis* L.
Part Used: Whole plant
Recipe: The juice obtained after crushing the whole plant is used to expel calculus from kidneys.

Plant: *Euphorbia prostrata* L.
Part Used: Whole plant
Recipe: The whole plant is taken, crushed and eaten with bread as a useful remedy for kidney stone.

Scurvy
Plant: *Naustertium officinale* L.
Part Used: Whole plant
Recipe: The whole plant is cooked and used for gum disease.

Stomach problems/Indigestion
Plant: *Mentha sylvestris* (L.) Huds. and *Mentha spicata* L.
Part Used: Leaves
Recipe: The leaves of Mentha sylvestris along with other vegetable and the leaves of Mentha spicata in the form of ketchup is used for stomach problems.

Tonic
Plant: *Berberis lycium* Royle
Part Used: Roots
Recipe: Powder drug obtained from roots is mixed with Desi ghee and tablets are made, which are used as tonic with milk.

Plant: *Geranium collinum* St. ex Wall
Part Used: Rhizome
Recipe: The rhizome is dig out, dried and made into powder by grinding. Then mixing the rhizome powder with wheat flour, sugar and Desi ghee, makes Halwa (Sweet dish). The Halwa is taken at night time as a tonic.

Plant: *Paeonia emodi* Wall. H.K.f.
Part Used: Rhizome
Recipe: The rhizome is dig out, washed, and dried. After drying the rhizome is grind into fine powder. Wheat flour, sugar and Desi ghee is added to form Halwa. It is used as a tonic to cure backbone ache.

Toothache
Plant: *Olea feruginea* Royle
Part Used: Leaves
Recipe: The leaves of *Olea ferruginea* are boiled in water and the hot decoction is used for toothache usually at night time.

Ulcers
Plant: *Boerhaavia diffusa* L.
Part Used: Roots
Recipe: Roots are crushed, boiled in milk and then a bandage is made which is used externally as a poultice in ulcers

Warts
Plant: *Solanum nigrum* L.
Part Used: Leaves
Recipe: The leaves are plucked and crushed in green condition. These crushed leaves are used externally in skin diseases, usually when skin has small warts.

Wounds
Plant: *Berberis lycium* Royle
Part Used: Roots
Recipe: Roots powder drug mixed with Desi ghee is used for healing internal wounds.

Plant: *Dodonea viscosa* (L.) Jacq.
Part Used: Fresh leaves
Recipe: The fresh leaves are crushed to the extent to become sticky and then tied on the effected part of the body for wounds healing.

Plant: *Viola serpens* Wall
Part Used: Whole plant
Recipe: The whole plant is taken and boiled in milk till it become gelatinous. Bandage is made from it and used as poultice for wounds.

Discussion

The primitive people of all ages had knowledge of medicinal plants which they acquire as a result of trail and error. This knowledge is still alive and several hundred species are used in herbal remedies in indigenous system of medicines, where the whole plant or plant or its extraction is used.

In Indo-Pak sub-continent first record of medicines where the plants held a predominant position were compiled in Rigveda between 4500-1600 B.C and Ayurveda during 2500-600 B.C. Under the later name the system of Ayurveda is still in practice. With the passage of time, the Greco-Arabic system of medicines made its headway in the India drug during the Mughal period. The newly introduced system incorporated many of the medicines from Ayurveda and became known as the Unani-medicines. However, with the advent of British rule in India, the indigenous system lost support of regime and allopathic system were gradually introduced (Zaman et al, 1970).

Pakistan has a diverse flora containing about 6000 species of phanerogams. Estimates indicate that around 700 plant species are used as medicinal and aromatic plants (Pei, 1992).

In Buner district, ethnobotanically most of the species reported has multiple uses. For example the seeds of *Aesculus indica* are locally used as vermifuge and anthelmintic, its shoots provide fodder, branches are used as fences, psycho spiritual remedies are written on its delicate bark, wood is used or making agricultural tools and house hold utensils. Similarly the nuts of *Juglans regia* are edible, also used in culinary preparations. Its roots, fruits and leaves are locally used for dying clothes, womenfolk use the bark for cleaning teeth (Dandasa) and coloring lips, wood is used for making furniture and leaves as fodder for cattle.

The medicinal plants are collected by the local people and are used to cure various ailments such as leaves decoction of *Ajuga bracteosa* Wall ex. Bth. is used in jaundice, hypertension and sore throat. Roots of *Adathoda vasica* L. is used in rheumatism, pneumonia and cough, while leaves are used as antiseptic, expectorant, antispasmodic, and demulcent. Gum of *Acacia modesta* Wall. is used as tonic and stimulant. Leaves of *Datura innoxia* Mill is used in toothache, headache and epilepsy, the seeds are antipyretic, and narcotic. *Paeonia emodi* Wall. HKf. is used in backache, dropsy. Epilepsy, convulsions, hysteria and uterine diseases. Local people and practitioners through traditional knowledge collect these medicinal plants. Most of these people form poorest link in the trade of medicinal plants (Hersch, 1995). The local people had a little knowledge about the species and proper time of collection (Shinwari and Khan, 1999).

An awareness program in the area about the importance of indigenous flora, sustainable plants collection and conservation of important medicinal plants will yield better results. The local community should be involved in conservation practices. Local staff, local stakeholders and plant collectors should be aware about the conservation of plant resources of the area (Aumeeruddy, 1996).

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